

ZEINA MALEK
Born in Damascus, June 2nd 1977
PhD in Neurosciences
zeina_malek@hotmail.com

Current Position (Starting on September 2015) : Associate Professor position. Faculty of Pharmacy. Syrian Private University (SPU), Damascus, Syria.

ACADEMIC POSITIONS IN THE UNIVERSITY OF KALAMOON (UOK), SYRIA

2015: In Charge of the research affairs, University Presidency.

2014: In Charge of implanting the university's learning and teaching strategy, University Presidency.

2010-2013: Head of Department of Physiology and Pharmacology, Faculty of Medicine.

2008-2015(August): Associate Professor position. Department of Physiology and Pharmacology, Faculty of Medicine.

PRIZES AND FELLOWSHIPS

- PhD Fellowship program of the French Medical Research Foundation: financial support during the 3rd and 4th years of the PhD

- Polonium program fellowship for researcher's exchange between France and Poland.

- Price of the best PhD thesis from the European Doctoral College of Strasbourg.

ACADEMIC STUDIES

2008: Post-Doctoral position. Laboratory of Imaging and Cognitive Neurosciences. Louis Pasteur University, Strasbourg, France.

Topic: *Myelin Biopathology and Imaging.*

2007: PhD thesis in Neurosciences. Institute for Cellular and Integrative Neurosciences. Louis Pasteur University, Strasbourg, France.

PhD topic: *Serotonin and Circadian Rhythms.*

2002: Master Degree in Neurosciences. Louis Pasteur University, Strasbourg, France.

Thesis topic: *Relationship between Raphe complex and biological clock*

2001: Bachelor Degree in Cellular Biology and Physiology. Grade: Nutrition physiology.

University of Dijon, Dijon, France.

2000: Higher Studies Diploma in Animal Biology. Faculty of Science, Damascus University, Damascus, Syria.

Thesis topic: *Analgesia and Swimming Stress.*

1999: Diploma Degree in Biology. Faculty of Science, Damascus University, Damascus, Syria.

RELEVANT EXPERIENCES

- Consultant in Ugarit Education Group: preparation of study plans for AlManara university

- Developmental projects: The French Agency for Development-AFD

- Scientific contributions in the Arabic Scientific Encyclopedia

- Teaching experience:

- Human physiology and pathophysiology: 2009-present time UOK and SPU Universities in Medicine and dentistry and pharmacy faculties, Syria.

- Neurosciences: 2005 Louis Pasteur University. Strasbourg France.

- The synaptic transmission: 2005 Louis Pasteur University. Strasbourg, France.

- Vartabrates and invertebrates anatomy: 2003-2004 Louis Pasteur University. Strasbourg, France

- Supervising Research Activities in Louis Pasteur University. Strasbourg, France:

-2005: undergraduate student.

- 2004: neuroscience master student in Polonium program.
- 2003: neuroscience bachelor students.
- 2003: cellular and molecular biology bachelor student.

RESEARCH RELATED SKILLS

In vivo techniques

Intracarotid cannulation in vivo for blood sampling
 Telemetry, Locomotor activity Study,
 siRNA in vivo, genic therapy in animal models for leukodystrophy
 Intracerebral microdialysis,
 Several surgical skills on animal models.

In vitro techniques

Primary glia cell cultures: mixed population of astrocytes and
 Oligodendrocytes
 Extracellular electrophysiological recordings of serotonergic cells.

Histology and Biochemistry

Immunocytochemistry (simple and double staining)
 Immunoautoradiography
 Radioactive *in situ* hybridisation
 Radio Immuno Assay

Molecular Biology

PCR
 Reverse transcription
 Cloning techniques

PUBLICATIONS AND SCIENTIFIC COMMUNICATIONS

1-Publications:

- Malek, Z.S., Dardente, H., Revel, F., Raison S. and Pevet P. **2003**: *Mesocricetus Auratus* Neuronal Tryptophan Hydroxylase. (GenBank access number AY 345967).
- Malek Z.,S., Pevet P. and Raison S. Circadian changes in Tryptophan Hydroxylase protein levels within the Rat Intergeniculate Leaflets and Raphe Nuclei. **Neuroscience 2004** 125 (3) 749–758.
- Malek Z.S., Dardente H., Pevet P. and Raison S. Tissue specific expression of Tryptophan Hydroxylase mRNAs in the rat midbrain: anatomical evidences and daily profiles. **European Journal of Neurosciences 2005** 22(4) 895-901.
- Malek Z.S., Sage D., Pevet P. and Raison S. Daily rhythm of Tryptophan Hydroxylase2 mRNA within Raphe neurons is induced by corticoid daily surge and modulated by enhanced locomotor activity. **Endocrinology 2007** 148(11) 5165-5172.
This article has been commented in a special editorial "News & Views" published in Endocrinology. Buijs R. M. and Escobar C. Corticosterone and Activity: The Long Arms of the Clock Talk Back. Endocrinology 2007 148(11) 5162-5164.
- Malek Z.S., Pevet P. and Raison S. Effect of photoperiod on the daily profiles of Tryptophan Hydroxylase2 mRNA in the rat raphe nuclei (**PhD Thesis**).

2-Communications in Meetings:

- Nexon L., Malek Z. S., Pevet P and Raison S. Poster : Influence de la photopériode sur l'expression journalière du gène *tph2* chez le Hamster doré. **35th Conference of the Society of Neuroendocrinology 2008** Strasbourg, France.
- Raison S., Malek Z.S., Sage D. and Pevet P. **Poster**: Le rythme circadien d'expression de l'ARNm de la tryptophane hydroxylase 2 dans les noyaux du raphé est induit par le rythme de corticostérone et modulé par l'activité locomotrice. **39th Conference of the French Society of Chronobiology 2007**. Paris, France.
- Malek Z.S., Sage D. Pevet P and Raison S. **Poster**: Effect of Corticosterone and Locomotor Activity on Tryptophan Hydroxylase 2 mRNA expression in Dorsal and Median Raphe Nuclei. **8th Conference of the**

French Society of Neuroscience 2007. Montpellier, France.

-Nexon L., **Malek Z. S.**, Pévet P. and Raison S. **Poster**: Daily variations of Tryptophan Hydroxylase 2 mRNA in the Syrian hamster in relation with photoperiod. *8th Conference of the French Society of Neuroscience 2007*. Montpellier, France.

-**Malek Z.S.**, Sage D. Pevet P and Raison S. **Poster**: Hormonal Regulation of Tryptophan Hydroxylase 2 mRNA Daily Rhythm Within the Rat Dorsal and Median Raphe Nuclei. *5th Forum of European Neuroscience 2006*. Vienna. Austria.

-Raison S., **Malek Z.S.**, Sage D. and Pevet P. **Speech**: Régulation de l'expression du gène Tryptophane Hydroxylase 2 chez le rat : Implication des glucocorticoïdes. *38th Conference of the French Society of Chronobiology 2006*. Lyon, France.

-**Malek Z.S.**, Pevet P. and Raison S. **Poster**: How the Circadian Clock Controls the Rhythmic Synthesis of Serotonin within the Raphe Nuclei. *10th Congress of the European Pineal and Biological Rhythm Society 2005*. Frankfurt, Germany.

-Pevet P., **Malek Z.S.** and Raison S. **Poster**: Glucocorticoids and Rhythmic Synthesis of Serotonin in the Rat Circadian System. *7th Colloquium of Neurosciences Society 2005*. Lille. France.

-**Malek Z.S.**, Pevet P. and Raison S. **Poster**: Glucocorticoids and Rhythmic Synthesis of Serotonin in the Rat Circadian System. *37th Conference of the French Society of Chronobiology 2005*. Strasbourg, France.

-Raison S., **Malek Z.S.** and Pevet P. **Poster**: Rhythmic Synthesis of Serotonin within Serotonergic afferences of the Rats Circadian System. *32nd Congress of Neuroendocrinology Society 2004*. La Grande-Motte. France.

-**Malek Z.S.**, Pevet P and Raison S. **Speech**: Rhythmic Synthesis of Serotonin within the Serotonergic Afferences to the Circadian System of Rat. *36th Conference of the French Society of Chronobiology 2004*. Rennes, France.

-**Malek Z.S.**, Raison S., Maître M. and Pevet P. **Poster**: Is there a Circadian Release of Serotonin within the Rat Intergeniculate Leaflet? *6th Colloquium of the Neuroscience Society 2003*. Rouen, France.

-**Malek Z.S.**, Raison S., Maître M. and Pevet P. **Poster**: Is there a Circadian Release of Serotonin within the Rat Intergeniculate Leaflet? *Neurex Annual Meeting 2003*. Basle, Switzerland.