

CURRICULUM VITAE

2002

PERSONAL INFORMATION

Name : Marwan N. Baliki
Place of Birth: Jub Janine, Lebanon
Date of Birth : May 17, 1978
Nationality : Lebanese

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EDUCATION

1999-2001 : Masters Degree in Neuroscience,
Faculty of Medicine, **American University of Beirut**

1995-1998 : Bachelor of Science-Biology,
Faculty of Arts And Science, **American University of Beirut**

1981-1995 : Lebanese Baccalaureate-Experimental Science
Evangelical School, Zahlé

WORK EXPERIENCE

2001-present : Research assistant in the Department of Physiology, **Northwestern University, USA**

1999- 2001 : Graduate Assistant in the Department of Humane Morphology,
American University of Beirut

Assistant instructor for the Neuroscience anatomy and physiology course, **American University of Beirut**

RESEARCH EXPERIENCE

My experience encompasses the following techniques:

Basic Techniques

- Tissue Processing and Slide Preparation
 - Paraffin embedded
 - Freeze fractured
- Slide Staining
 - Hematoxylin/eosin
 - Cresyl echt violet
 - Silver impregnation
- Immunohistochemistry (Horse Radish Peroxidase Technique)
- Western Blotting

Animal Handling, Surgery and Electrophysiology

- Neuropathic induction in the sciatic nerve (Woolf and Bennett models)
- Stereotaxic lesions, mini-pump and canula insertion in brain
- Total animal fixation with formalin
- Dorsal column stimulation and lesioning
- Behavioral pain assessment techniques including: Von-Frey filament application, paw irradiation, hot plate and cold allodynia drop tests
- Electrophysiological recordings.
- Teeth treatment and perfusion

Functional Magnetic Resonance Imaging (fMRI)

- Handling and operating scanners
- Good knowledge in fMRI analysis tools and software including: Afni, FSL, Medx, SPM and MRICrow

ACCOMPLISHMENTS

Thesis

Supraspinal Modulation of Neuropathic pain: The Role of the Limbic and Somatomotor Cerebral Centers. Submitted in partial fulfillment of the requirements for the degree of Master of Science to the Interfaculty Graduate Program in Neuroscience. Department of Human Morphology, Faculty of Medicine at the American University of Beirut, 2001

Abstracts

M. Baliki, Y. Sosa, T.B. Parrish, R.N. Harden, R.M. Levy, J.C. Houk, D.R. Chialvo and A.V. Apkarian. Chronic Back Pain (CBP) is An Orbitalfrontal Condition: An fMRI Study On Ongoing Pain. Society for Neuroscience, November 2002.

M. Baliki, N. Hawwa, A. V. Apkarian, N. Bahuth, S. J. Jabbur, and N. E. Saade. Attenuation of Mononeuropathic (MNP) Manifestations In Rats By Chemical Manipulation Of The Ventral Orbital Cerebral (VOC) Area. Society for Neuroscience, November 2002.

S. J. Jabbur, Chidiac J, N. Hawwa, **M. Baliki**, J.J. Chidiac, K. Rifai, and N. E. Saade. Pulpectomy And Occlusion Of Dentinal Tubules Prevent The Nociceptive Behavior Induced By Intradental Application Of Irritants In Awake Rats. Society for Neuroscience, November 2002.

N. Hawwa, C. El-Khoury, **M. Baliki**, S. J. Jabbur, S. F. Atweh, and N. E. Saade. Dorsal Column Stimulation (D.C.S.) Modulates Pain Through Segmental And Supraspinal Mechanisms. 2nd World Congress of W.I.P. BRI9: 205, June 2001.

M. Baliki, C. El-Khoury, N. Hawwa, S. J. Jabbur, A. V. Apkarian, and N. E. Saade. Modulation of Mononeuropathy-Induced Allodynia Through Descending Influences From The Orbital Cortex. 2nd World Congress of W.I.P. BRI9: 206, June 2001.

C. El-Khoury, N. Hawwa, **M. Baliki**, S. F. Atweh, S. J. Jabbur, and N. E. Saade. Dorsal Column Stimulation (DCS) Inhibits Neuropathic Pain Through Supraspinal Mechanisms. Society for Neuroscience, November 2001.

K. Rifai, J.-J. Chidiac, N. Hawwa, **M. Baliki**, C. El-Khoury, S. J. Jabbur, and N. E. Saade. Occlusion of Dental Tubules Prevents Nociceptive Behavior Induced By Intradental Application of Irritants. Meeting of the European Academy of Craniomandibular Disorders, Cardiff, September 2001.

J.J. Chidiac, N. Hawwa, **M. Baliki**, C. El-Khoury, K. Rifai, S. J. Jabbur, and N. E. Saade. A New Experimental Approach to the determination of the levels of inflammatory Mediators in the Rat's Tooth Perfusate by ELISA. Meeting of the European Academy of Craniomandibular Disorders, Cardiff: September 2001.

Publications

C El-Khoury, N Hawwa, **M Baliki**, S F Atweh, S J Jabbur, and N E Saade. Attenuation of neuropathic pain by segmental and supraspinal activation of the dorsal column system in awake rats. *Neuroscience*. 2002; 112(3): 541-53

N E Saade, **M. Baliki**, C El-Khoury, N Hawwa, S F Atweh, A V Apkarian and S J Jabbur. The role of the dorsal columns in neuropathic behavior: evidence for plasticity and non-specificity. *Neuroscience*. 2002; 115(2):403-13.

Chidiac J, Hawwa N, **Baliki M**, Safieh-Garabedian B, Rifai K, Jabbur S, Saade N.A perfusion technique for the determination of pro-inflammatory mediators induced by Intradental application of irritants. *J Pharmacol Toxicol Methods* 2001; 46(3):125

Current work

M Baliki, H.A. Al-Amin, S.F. Atweh, M. Jaber, N. Hawwa, S.J. Jabbur, A.V. Apkarian and N.E. Saade. Attenuation of neuropathic manifestations by local block of activities of the ventrolateral orbital-frontal area in the rat. Submitted to *Neuroscience*, December, 2002.

Baliki M, Calvo O, Chialvo D.R, Apkarian A.V. AlgoTrack: A Thermal Algesia Tool in Awake Behaving Rodents. Will be submitted to *Pain* in December, 2002.

SPECIAL WORKSHOPS AND CONFERENCES

- 2001** :The Second World Congress of the World Institute of Pain. Istanbul, Turkey.
- 2002** : Course On FSL Software For Brain Imaging. Oxford, England.
- : Society For Neuroscience 32nd annual meeting. Orlando, USA

ACTIVITES

- 2000-2001** : Member of the Student Representative Committee- Faculty of Medicine.
Member of the University Student and Faculty Committee
- 1998-2000** : Member of The Human Rights and Peace Club.
Member of The Graduate Student Society.
- 1997-1999** : Member of The Biology Student Society

LANGUAGES

- Arabic (native language)
- English (written and spoken fluently)
- French (written and spoken fairly)

REFERENCES

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