RECHDI AHDAB, MD, PhD Curriculum Vitae and Bibliography 2020

Biographical:

Professional Address: Lebanese American University Medical Center Rizk Hospital

(LAU Medical Center-RH)

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Home Address: Deaibis Bldg, 9th floor, Istiklal St, Beirut, Lebanon

Date/Place of Birth: July 12, 1975, New York, USA

Social Status: Married to Oussaima Dbouni, 4 children

Nationality: Lebanese and American

Languages: Arabic: excellent (proficient)

English: excellent (proficient) French: excellent (proficient)

Education:

1993 French Baccalaureate Lycée Franco-Libanais, Koura, Lebanon

1993-2000 MD Lebanese University, Beirut, Lebanon

Post Graduate Education:

2000-2005 Resident, Neurology Lebanese University, Beirut, Lebanon

2005-2006 Resident, Neurology Hopital Tenon, Paris, France

2006-2007Resident NeurologyHopital Henri Mondor, Paris, France2007-2010Fellowship ClinicalHopital Henri Mondor, Paris France

Neurophysiology

2008-2009 Post-graduate diploma of Université Lille II, Lille, France

Clinical Neurophysiology

2008-2010 PhD Pharmacology and Université Paris Est, Paris, France

Biotherapy

Certification and Licensure:

2010-present ACLS certified

2010 Medicine certificate, MOH and LOP, Lebanon 2010 Neurology certificate, MOH and LOP, Lebanon

Professional Society Memberships:

2019-present Lebanese Neurological Association 2012-present Lebanese League Against Epilepsy

2011-present National Organization for Organ and Tissue Donation and Transplantation 2005-Present EA 4391, Excitabilité Nerveuse et Thérapeutique, Université Paris-Est

Professional Experience:

I. Academic and Administrative Appointments / Ranks:

2015-present Co-Director, Neurology Residency Program

LAU SOM

2011-present Director, Neurology Clerkship, Med III

LAU SOM

2014-present Associate Professor, tenure track

LAU SOM

II. University Committees

2019-present Central Curriculum Committee

LAU SOM

2019-present Central Program Evaluation and Assessment Committee

LAU SOM

2018-2019 University Promotion Council

LAU School of Medicine

2017-present SOM peers review committee

LAU

2014-2016 University research council

LAU

2011-present Student promotion board Med III

LAU

2011-present Student promotion board Med IV

LAU SOM

2018-present Research committee

LAU SOM

Academic Leadership Responsibilities and Professional Services:

2011-present Developed the **neurology program** at LAU SOM and LAUMCRH. All Neurology

programs continue to be updated as needs change and the LAU SOM continues

to grow: e.g. opened a comprehensive stroke unit at LAU SOM and

LAUMCRH, the first in Lebanon.

2011-present Introduced many innovations to the neurophysiology laboratory such as

specialized electrodiagnostic tests (motor evoked potentials, single fiber EMG, cortical excitability testing, tremor studies, autonomic tesing), neuromodulation (transcranial direct current stimulation), deep brain stimulation for Parkinson's disease and Essential tremor, intraoperative neuromonitoring (spinal cord and

brainstem surgery), and cortical mapping (brain surgery).

2011-present Designed the Neurophysiology course for LAU Med II students and the problem

based learning case scenarios. Formulated learning objectives, developed wrote and reviewed exams questions, and involved in the yearly review of the module.

Teaches ~ 25 hours/year at LAU SOM Byblos during the module.

2011-present Re-designed the Neurology Clerkship in accordance with the accreditation

requirements. In particular, mapping of domains with competencies, learning objectives, and assessment methods was performed. Improvements were made to the clerkship with the addition of 20 new lectures to address the students weaknesses on standardized exams. An updated Neurology Clerkship guide was

drafted accordingly.

2015-present LAU Neurology Residency Program: assisted in the creation and development

of the residency in its entirety. Currently 6 residents are enrolled in the program: the first resident graduated from the program in 2019 and was accepted in a Neuroimmunology and Multiple Sclerosis fellowship in London, England.

Performance on RITE exam of our neurology residents' is consistently

between the 80-97th percentile compared to US residents and residents from all

other participating programs worldwide.

2014-2016 Chair of the SOM research committee: Worked on establishing the process of

research at the LAU SOM and LAUMCRH to facilitate the submission review, acceptance and conduct of research proposals both at the SOM and LAUMC-

RH;

2016-present Active member of the SOM research committee. A. Provide support to the SOM

faculty to help enhance research, develop research policies and solicit funds necessary to implement research programs. B. Provide training to the faculty on various aspects of research. C. Training and supervision of post-Doctoral

fellowship in research.

Additional administrative functions/services:

2015 LAU affiliation with Paris Est University and Henri Mondor Hospital:

Instrumental role in the affiliation created for collaborative research projects and

exchange of Medical Students and Residents.

2016 LAU and Al Hamidi Charity Medical Center in Tripoli sign a memorandum of

understanding: Instrumental role in the affiliation created for collaborative

research projects and an outpatient clinic for neurology residents.

Innovations in Medical Education/List of Firsts at LAU:

2020 Head of the scientific team that will lead Michael Haddad to the North Pole.

Michael is paraplegic since age 6 but acquired the ability to ambulate

independently using a special exoskeleton and elbow crutches. He is currently

UNDP Arab State Regional Goodwill Ambassador for Climate Change Champion. The expedition's primary goal is to raise awareness on climate

change, in particular the catastrophic arctic melt.

2019 First Neurology resident graduated from the LAU Neurology residency program

2019 First to develop a one week course on Introduction to Research for the Post-

Doctoral Fellows

2015 First to start funded investigator-initiated clinical trials at LAU with the recent

publication of the first study in Brain Sciences

2014 First to obtain a grant to conduct a Primary Investigator initiated research study

at LAU SOM and LAUMCRH

III. Peer teaching:

a. Instructor:

2007-2010 Université Paris Est, Faculté de Médecine (Neurophysiology, Cell

membrane physiology)

2010-2020 Lebanese American University, SOM (Neurophysiology, Clinical Neurology,

Neuroembryology)

Advising/mentoring:

2009-present Assigned 2-3 advisees per academic year (Med III/Med IV students)

Neurologists trained or in training:

2014	Dr. Wissam Yamak	UL
2015	Dr. Hiba Saade	UL
2016	Dr. Samer Abes	UL
2017	Dr. Roudy Nawar	UL
2018	Dr. Manale Nader	UL
2019	Dr. Madiha Shatila	LAU SOM
2020	Dr. Joumana Freiha	LAU SOM
2020	Dr. Karim Makhoul	LAU SOM
2021	Dr. Romy Zgheib	LAU SOM
2022	Dr. Odei Al Ayyas	LAU SOM
2022	Dr. Ali Sreij	LAU SOM
2022	Dr. Mohamad Mehdi	LAU SOM
2023	Dr. Christelle Ibrahim	LAU SOM
2023	Dr. Dina Lzeik	LAU SOM

⁴ of these graduates are currently practicing in the UAE and Europe

Master Students Thesis Advisor:

2019 Dr. Ghida Radwan Master of Neuroscience (Lebanese University)

Restless Legs Syndrome in Lebanese pregnant women: an under

recognized condition?

2018 Dr. Madiha Chatila Master of Neuroradiology (Lebanese University)

Underreporting of characterisitic brain imaging findins in multiple

sclerosis

2017 Dr. Mohamad Noureddine Master of Neuroradiology (Lebanese University)

Quantification of Corticospinal Tract Atrophy Using Diffusion Tensor

Imaging: A Potential Diagnostic Tool in Amyotrophic Lateral

Sclerosis

2017 Dr. Karim Makhoul Master of Neuroradiology (Lebanese University)

Motor Mapping of the palatal cortical representation

Research Supervision:

- 1. Mohammad Hassan Noureddine (neurosurgery resident): 4 publications (one in preparation)
- 2. Anthony Mansour (Medical student): 3 publications (one in preparation)
- 3. Hiba Saade (Neurology resident): 2 publications
- **4. Manal Nader** (Neurology resident): 1 publication (1 in preparation)
- 5. Madiha Shatila (Neurology resident): 1 publication
- **6. Karim Makhoul (**Neurology resident): 1 publication (3 in preparation)
- **7. Journal Freiha** (Neurology resident): 1 publication (3 in preparation)
- **8. Romy Zogheib** (Neurology resident): 1 paper in preparation
- **9. Supervision of research fellows** (this includes training, assigning research projects, writing the proposal, submission to IRB)

Public Services:

Awareness Program with NOODT about brain death and organ donations; undergone training with the Spanish team; several lectures to grand public all over Lebanon; trainings for nurses, intensive care physicians; seminars with religious authorities

Regularly attend the Hamidy Medical Center, a dispensary in an underserved area of Tripoli. I have heavily invested in the institution for the past 8 years. Services provided:

- a. Weekly general neurology consults
- b. Created a complete neurophysiology laboratory: quality testing of acquired equipment, trained technicians, created video EEG facility, recruited the needed staff to run the laboratory.
- c. Created an Institutional Review Board (IRB) approved by the Lebanese Ministry of Health (drafted the terms of reference, designated and trained members, and guided the submission process to obtain the approval of the MOH)
- d. Administrative services (Peer reviewing committee, recruitment of new physicians and staff, strategic planning, design of awareness campaigns, reference person when it comes to research activity at the center)

Head of the scientific team that will lead Michael Haddad to the North Pole. Michael is paraplegic since age 6 but acquired the ability to ambulate independently using a special exoskeleton and elbow crutches. He is currently UNDP Arab State Regional Goodwill Ambassador for Climate Change Champion. The expedition's primary gaol is to raise awareness on climate change, in particular the catastrophic arctic melt.

A Full intraoperative training program was offered to Medtronic distributor technicians working in the intraoperative monitoring field. Trainees were then supervised until independently able to perform the procedures and provide good quality data for remote monitoring.

TEDx LAU salon: The brain: from Stroke to Depression

Consultant and international speaker for Medtronic (Introperative neuromonitoring expert: scope of activities include training of staff and surgeons, expert opinion on problematic cases, live case support)

Consultant and international speaker for Sooma, Finland (transcranial direct current stimulation expert: scope of activities include introduction of the technique to the middle east, trainings, clinical studies to expand the current indications)

Journal Reviewer:

Muscle and Nerve

Journal of Neurology, Neurosurgery, and Psychiatry

Neurophysiologie Clinique

Multiple sclerosis and related disorders

Clinical Studies:

- 1- Cortical excitability changes predict response to Fampridine in MS patients with walking disabilities, Co-Investigator, 2016-2017
- 2- Cortical Excitability Changes in Relapsing Remitting Multiple Sclerosis Patients Started on Gilenya (Fingolimod), Co-Investigator, 2016-present
- 3- The effects of transcranial direct current stimulation on hand dexterity in multiple sclerosis, Co-Primary Investigator, 2015-present
- 4- Abnormalities of Ulnar Nerve Conduction in Carpal Tunnel Syndrome, Primary Investigator, 2015-2017
- 5- Investigating Diabetic Peripheral Neuropathy, Primary Investigator, 2017-present
- 6- A Multicenter, Multinational, Observational Study to Collect Information on Safety and to document the Drug Utilization of Fampyra When Used in Routine Medical Practice in Lebanon, Investigator, 2017-present
- 7- Transcranial Direct Current Stiumlation (tDCS) as a prophylactic treatment in migraine patients, Primary Investigator, 2017
- 8- Vitamin B6 toxicity on the nervous system, Primary Investigator, 2017-present
- 9- The Efficacy of Transcranial Direct Current Stimulation in Patients with Medication Overuse Headaches Secondary to Chronic Migraines, Primary Investigator, 2017-2019
- 10- A 12-week double-blind, randomized, multi-center study comparing the efficacy and safety of once monthly subcutaneous AMG 334 against placebo in adult episodic migraine patients (EMPOwER), 2018-2019
- 11- An open label, single arm, 4 year study to evaluate effectiveness and safety of ocrelizumab treatment in patients with progressive multiple sclerosis, (CONSONANCE), 2018-present
- 12- A Prospective, Multicenter, Observational Study to Evaluate Patients' Quality of Life in Routine Clinical Practice in Patients with Relapsing-Remitting Multiple Sclerosis (RRMS) Treated with LEMTRADA®, 2019-2020

- 13- The medial plantar/sural SNAP ratio: a sensitive marker of early diabetic neuropathy, Primary Investigator, 2019-present
- 14- Incidence of diabetic neuropathy in a cohort of diabetic patient in North Lebanon, Primary Investigator, 2019-present
- 15- The Efficacy of Trans-spinal Direct Current Stimulation in Patients with Multiple Sclerosis and lower extremity Spasticity, Primary Investigator, 2019-present
- 16- Influence of BMI on Ulnar Nerve Conduction Velocity at the Elbow, Primary Investigator, 2019-present
- 17- The Efficacy of Transcranial Direct Current Stimulation in Patients with Essential Tremor, Primary Investigator, 2019-present

Grants (PI or Co-PI) and Donations:

a. Grants:

- 1. PI initiated study: Cortical excitability changes predict response to Fampridine in MS patients with walking disabilities, Co-PI, 2016-2017, Grant from Biogen Idec Switzerland: 37,250 \$
- 2. PI initiated study: Cortical Excitability Changes in Relapsing Remitting Multiple Sclerosis Patients Started on Gilenya (Fingolimod), Co-PI, 2017-2019, Grant from Novartis Switzerland: 200,000 \$
- 3. PI initiated study: Vitamin K2 Status and Arterial Stiffness Among Untreated Migraine Patients: A Case-Control Study: Co-PI, Grant from Nattopharma ASA, Norway and Omicron Pharmaceuticals, 29360 \$
- 4. Investigating Diabetic Peripheral Neuropathy: Principal Investigator, 2017-2018, Grant from LAU GSR: 20,000 \$
- 5. Vitamin B6 Toxicity on the Nervous System, Principal Investigator, 2017 CNRS grant, 20000\$

b. Donations:

2015: SOOMA donated two transcranial Direct Current Stimulation (tDCS) machines to the Hamidiy medical center for the conduct of research studies (value of 20,000 Euros)

2017: SOOMA donated two transcranial Direct Current Stimulation (tDCS) machines to the Neurology division for the conduct of research studies (value of 20,000 Euros)

2020: Inerventions AB will loan the Neurology division 40 Mollii suits for the conduct of a research study at LAU SOM and LAUMCRH for a duration of 3 months (price of each suit: 6,000 \$)

c. Grants (applied for):

Migraine Research Foundation: The efficacy of transcranial Direct Current Stimulation in patients with medication overuse headaches secondary to chronic migraines, Co-Principal Investigator, Applied July 2017 for 31,500 \$, refused

AHA: Investigate the association between worsening peripheral neuropathy as measured by the change in ratio of medial plantar to sural nerve, serum low-density lipoprotein cholesterol (LDL-C) and pulse wave velocity, in collaboration with Dr. Francine Welty, Beth Israel Deaconess Medical Center, Harvard, Boston, for 742,629 \$, refused (despite excellent reviews for the Lebanese Team)

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- 1. Publications in scopus indexed/pubmed indexed journals
- 1. <u>Ahdab R</u>, Thabuy F, Ménager de Froberville E, Brugières P, Hosseini H. Reversible vertebral artery stenosis following corticotherapy in giant cell arteritis. Eur Neurol, 59:331, 2008
- 2. Ahdab R, Drouet T. Palatal tremor, focal seizures and elevated anti-thyroid antibodies. Clin Neurol Neurosurgery,110:381-383, 2008
- 3. Ahdab R, Riant F, Brugières P, Roujeau JC, Hodel J, Hosseini H. Familial cerebral cavernomatous malformations associated with palmar capillary telangiectasias. Neurology, 71:861-862, 2008
- 4. Lefaucheur JP, Antal A, Ahdab R, Ciampi de Andrate D, Fregni F, Khedr EM, Nitsche M, Paulus W. The use of repetitive transcranial stimulation (rTMS) and direct current stimulation (tDCS) to relieve pain. Brain stimulation, 1:337-344, 2008
- 5. Ciampi de Andrade D, Andrade D, Lefaucheur JP. Non-invasive cortical stimulation for the treatment of pain. Biocybernetics and Biomedical Engineering, 2008
- 6. Ayache S, Ahdab R, Neves DO, Nguyen JP, Lefaucheur JP. Thalamic deep brain stimulation restores defective cerebello-cortical inhibition in multiple sclerosis tremor. Mov disorder, 24:467-479, 2009

- 7. Ahdab R, Lefaucheur JP, Malapert D, Touze E, Caudie C, André C, Créange A. Neuropathy with anti-disialosyl IgM antibodies and multifocal persistent motor conduction blocks. J Neur Neurosur Psychiatry, 80:700-702, 2009
- 8. Ahdab R, Michel M, Neves DO, Lefaucheur JP. Persistent pseudo-conduction bloc as a sequel of axonal growth in vasculitic neuropathy. Muscle Nerve. 40:290-3, 2009
- 9. Neves DO, Lefaucheur JP, Ciampi de Andrade D, Hattou M, Ahdab R, Ayache SS, Le Guerinel C, Keravel Y. A reappraisal of the value of lateral spread response monitoring in the treatment of hemifacial spasm by microvascular decompression. J Neurol Neurosurg Psychiatry., 80:1375-80, 2009
- 10. <u>Ahdab R</u>, Lefaucheur JP, Benaderette S, Créange A. Cervical Spondylotic Atrophy Presenting as Dropped Head Syndrome. Clin Neurol Neurosurg., 111:874-6, 2009
- 11. <u>Ahdab R</u>, S.S. Ayache, P. Brugières, J.-P. Lefaucheur. Comparison of "standard" and "navigated" procedures of TMS coil positioning over prefrontal or premotor targets in depressive patients. Neurophysiol Clin., 40:27-36, 2010
- 12. <u>Ahdab R</u>, Lefaucheur JP. Electrophysiological evaluation of cauda equina and lumbosacral cord lesions. Pelvi-Périnéologie, 5:22-27, 2010
- 13. <u>Ahdab R</u>, Lefaucheur JP Electromyography and spinal stenosis. Pelvi-Périnéologie, 5:155-163, 2010
- 14. Ahdab R, Ayache SS, Maltonti F, Brugières P, Lefaucheur JP. Motor neuron disorder with tongue spasms due to pyrethroid insecticide toxicity. Neurology, 76:196-197, 2011
- 15. van Meerbeeck P, Fénelon G, Ahdab R, Lefaucheur JP. Electrophysiological assessment of a case of limb myorhythmia. Clin Neurophysiol., 121:2180-3, 2010
- 16. Boërio-Guéguen D, Ahdab R, Ayache SS, Kerschen P, André C, Créange A, Lefaucheur JP. Nerve excitability and conduction studies in a case of rapidly regressive acute motor neuropathy with multiple motor conduction blocks. J Periph Nerv Syst. 15:369-372, 2010
- 17. **Farhat W**, <u>Ahdab R</u>, **Hosseini H**. Congenital agenesis of internal carotid artery with ipsilateral Horner presenting as focal neurological symptoms. Vasc Health Risk Manag. Jan 26;7:37-40, 2011
- 18. Ayache SS, Ahdab R, Brugières P, Eizenbaum JF, Authier FJ, Fénelon G, Lefaucheur JP. A reappraisal of long-latency abdominal muscle reflexes in patients with propriospinal myoclonus. Movement disorder. 26:1759-63, 2011

- 19. Lefaucheur JP, Ayache SS, Sorel M, Farhat W, Zouari HG, Ciampi de Andrade D, Ahdab R, Ménard-Lefaucheur I, Brugières P, Goujon C. Analgesic effects of repetitive transcranial magnetic stimulation of the motor cortex in neuropathic pain: influence of theta burst stimulation priming. Eur J Pain. Apr 16, 2012
- 20. Lefaucheur JP, Ahdab R, Ayache SS, Lefaucheur-Ménard I, Rouie D, Tebbal T, Neves D, Ciampi de Andrade D. Pain related evoked potentials: a comparative study between electrical stimulation using a concentric planar electrode and laser stimulation using a CO2 laser. Neurophysiol Clin. Jun;42(4):199-206, 2012. Epub Jan 20, 2012
- 21. Ahdab R, Riachi N. Vertical "half-and-a-half" syndrome. J Neurol Neurosurg Psychiatry. Aug;83(8):834-5. Epub 2012 May 21, 2012
- 22. Mylius V, Ayache SS, Ahdab R, Farhat WH, Zouari HG, Belke M, Brugières P, Wehrmann E, Krakow K, Timmesfeld N, Schmidt S, Oertel WH, Knake S, Lefaucheur JP. Definition of DLPFC and M1 according to anatomical landmarks for navigated brain stimulation: Inter-rater reliability, accuracy, and influence of gender and age. Neuroimage. Apr 6. doi:pii: S1053-8119(13)00311-X. 10.1016/j.neuroimage.2013.03.061, 2013
- 23. <u>Ahdab R</u>, Creange A, Saint-Val C, Farhat W, Leufaucheur JP. Rapidly progressive amyotrophic lateral sclerosis initially masquerading as a demyelinating neuropathy. Neurophysiol Clin. Jun;43(3):181-7, 2013
- 24. <u>Ahdab R</u>, Saade HS, Kikano R, Ferzli J, Tarcha W, Riachi N. Pure ipsilateral central facial palsy and contralateral hemiparesis secondary to ventro-medial medullary stroke. J Neurol Sci. Jul 9. doi:pii: S0022-510X(13)00305-5. 10.1016/j.jns.2013.06.028, 2013
- 25. Ahdab R, Ayache SS, Farhat WH, Veit Mylius V, Schmidt S, Brugières P, Lefaucheur JP. A reappraisal of the anatomical landmarks of motor and premotor cortical regions for image-guided brain navigation in TMS practice. Human Brain Mapping. Sep 3. doi: 10.1002/hbm.22339, 2013
- 26. <u>Ahdab R</u>, Riachi N. Reexamining the Added Value of Intermittent Photic Stimulation and Hyperventilation in routine EEG practice. European Neurology, 71:93-98, 2014
- 27. Ahdab R, Ayache SS, Farhat W, Kerschen P, Lefaucheur JP. Motor evoked potentials of the palatal muscles. Clinical Neurophysiology, Dec 21, 2013
- 28. Ayache SS, Gracies JM, Ahdab R, Farhat WH, Fenelon G, Lefaucheur JP. Action-induced clonus: Underlying mechanisms revisited. Clinical Neurophysiology, Dec 3, 2013

- 29. <u>Ahdab R</u>, **Kikano R**, **Saade H**, **Riachi N**. Early corticospinal tract Wallerian degeneration versus mesencephalic substantia nigra degeneration secondary to striatal stroke. Clin Neurol Neurosurg.,118:101-2, 2014
- 30. Ayache SS, Créange A, Farhat WH, Zouari HG, Mylius V, Ahdab R, Abdellaoui M, Lefaucheur JP. Relapses in multiple sclerosis: effects of high-dose steroids on cortical excitability. Eur J Neurol. Jan 28, 2014
- 31. Ghassibe-Sabbagh M, Deeb M, Salloum AK, Mouzaya F, Haber M, Al-Sarraj Y, Chami Y, Akle Y, Hirbli K, Nemr R, Ahdab R, Platt DE, Abchee AB, El-Shanti H, Zalloua PA. Multivariate epidemiologic analysis of type 2 diabetes mellitus risks in the Lebanese population. Diabetol Metab Syndr. Aug 21;6(1):89, 2014
- 32. Chalah MA, Riachi N, Ahdab R, Créange A, Lefaucheur JP, Ayache SS. Fatigue in Multiple Sclerosis: Neural Correlates and the Role of Non-Invasive Brain Stimulation. Front Cell Neurosci. Nov 30;9:460, 2015
- 33. Chalah MA, Ayache SS, Riachi N, Ahdab R. Permanent reversal of essential tremor following a frontal lobe stroke. J Neurol Sci. Jul 15;354(1-2):133-4, 2015
- 34. Attal N, Ayache SS, Ciampi De Andrade D, Mhalla A, Baudic S, Jazat F, Ahdab R, Neves DO, Sorel M, Lefaucheur JP, Bouhassira D. Repetitive transcranial magnetic stimulation and transcranial direct current stimulation in neuropathic pain due to radiculopathy: a randomized sham controlled comparative study. Pain. Feb 3, 2016
- 35. Ahdab R, Farhat WH, Chalah MA, Kerschen P, Lefaucheur JP, Ayache SS. Central and peripheral motor drive to the palatal muscles. Neurophysiol Clin. Feb 15, 2016
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- 38. **NoureIdine MH, Sweid A, <u>Ahdab R.</u>** Miller Fisher syndrome presenting as palate paralysis. J Neuroimmunol. Sep 15;298:130-1, 2016
- 39. Chalah MA, Riachi N, Ahdab R, Mhalla A, Abdellaoui M, Créange A, Lefaucheur JP, Ayache SS. Effects of left DLPFC versus right PPC tDCS on multiple sclerosis fatigue. J Neurol Sci. Jan 15;372:131-137, 2017

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- II. Non-indexed journals and book chapters
- 1. **Ahdab R**, **Hosseini H.** Brain imaging prior to carotid surgery. In Controversies and Updates in Neurovascular Surgery, Becquemin JP, Alimi YF. Minerva media:33-35, 2007

- 2. Ciampi de Andrade D, Ahdab R, Lefaucheur JP. Non-invasive cortical stimulation for the treatment of pain. Biocybernetics and Biomedical Engineering, 2008
- 3. Ahdab R, Hosseini H. Thromboses veineuses cérébrales. EMC cardiologie, 2009
- 4. **Aouad P, Serhal A, Comair Y, Ahdab R, Kikano R**. Intraventricular cavernous haemangioma located at the foramen of Monro. Eurorad, Case 12716, 2015
- 5. <u>Ahdab R.</u> Embryology and Development of the Nervous System. Neuroanatomy Basics: A Clinical Guide. Mohamad Hassan Noureldine, Elsevier:39-64, 2017
- 6. <u>Ahdab R.</u> Cerebral Cortex. Neuroanatomy Basics: A Clinical Guide. Mohamad Hassan Noureldine, Elsevier:269-290, 2017
- 7. Ahdab R, Salehi F, Kikano R. Inflammatory and Infectious Lesions of the Brainstem in Jallo GI, Noureldine MHA, Shimony N (eds) Brainstem Tumors: Diagnosis and Management. Cham: Springer International Publishing AG, In Press.
- 8. **NoureIdine MHA, Shimony N, <u>Ahdab R</u>, Jallo GI**. Brainstem and Spinal Cord Mapping in Chaichana K, Mahato D, Quinones-Hinojosa A (eds) Brain Mapping: Indications and Techniques. New York: Thieme, In Press.

IV. Posters

- 1. <u>Ahdab R</u>, Thabuy F, Menager de Froberville E, Di Virgillio G, Brugière P, Hosseini H. Sténose vertébro-basilaire réversible sous corticoïdes et anticoagulant au cours d'une maladie de Horton. JNLF, Paris, France, 2007
- **2.** Blanc R, Hodel J, Ahdab R, Gallas S, Menager E, Gaston A, Hosseini H. Traitement endovasculaire des AVC ischémiques à la phase aigue: Expérience du centre hospitalouniversitaire Henri-Mondor. Xeme Journées de neuroradiologie de langue française, Paris, France, 2008
- **3. van Meerbeeck P, J, Lefaucheur JP, <u>Ahdab R</u>, Fenelon G.** Paraneoplastic limb myorhythmia: Brainstem or spinal generator? Movement disorder society 12th international meeting, Chicago, USA, 2008

- **4. Samar S. Ayache, Andab R, Pierre Brugières , Jean-Pascal Lefaucheur.** A reappraisal of the anatomical landmarks of motor and premotor cortical regions for image-guided brain navigation in TMS practice. 4th international conference on TMS, Rome, Italy, 2011
- **5. Ayache SS, Ahdab R, Riachi N, Chalah M.** Curative stroke in the setting of essential tremor. European stroke Conference, Berlin, Germany, 2017
- **6. Riachi NJ, Mansour A, Ahdab R.** Transcranial Direct Current stimulation as a prophylactic therapy in migraine patients. WCN, Kyoto, Japan, 2017
- **7. Riachi N, Mansour AG, Salem M, Khazen G, Khoury C, Sabbouh T, Jabri T, Ahdab R.** The Efficacy of Transcranial Direct Current Stimulation in Patients with Medication Overuse Headaches Secondary to Chronic Migraines. American Academy of Neurology, Florida, USA, 2018
- **8.** Mansour A, Ahdab R, Daaboul Y, Korjian S, Salem M, Hariri E, Khoury C, Riachi N, Aoun Bahous S. Vitamin K2 Status and Arterial Stiffness Among Untreated Migraine Patients: A Case-Control Study. American Headache Society, San Francisco, USA, 2018
- 9. Ahdab R, Shatila M, Shatila AR, Khazen G, Freiha J, Salem M, Makhoul K, Nawwar R, El Nemr S, Ayache SS, Riachi N. Cortical Modulatory Effect of Fampridine in Patients with Multiple Sclerosis and Gait Impairment. ECTRIMS, Berlin, Germany, 2018
- **10. NoureIdine MHA, Daulei YA, Kikano R, Riachi N, Fares Y, Andab R, Zaylaa A.**Quantification of Corticospinal Tract Atrophy Using Diffusion Tensor Imaging: A Potential Diagnostic Tool in Amyotrophic Lateral Sclerosis. 2nd IEEE International Multidisciplinary Conference on Engineering Technology, IMCET, Beirut; Lebanon, 2018
- **11. Riachi N, Khazen G, Ahdab R, Lundqvist F, Jörgen S**. Pain Reducing Properties of the Mollii Suit on Adults with Chronic pain syndromes. WCN, Dubai, UAE, 2019

Invited Speaker at professional scientific meetings (local and International):

- 1. Repetitive transcranial magnetic stimulation and chronic pain. SASP, Turku, Finland, 2008
- Repetitive transcranial magnetic stimulation and implanted cortical stimulation in the treatment of neuropathic pain. Second international workshop on navigated TMS, Berlin, Germany, 2010

- 3. Medtronic Neuro-spine Meeting and Training, Istanbul, Turkey, 2014
- 4. Medtronic sponsored Neuro-intraoperative monitoring Training, Dubai, 2014
- 5. Medtronic sponsored Neuro-intraoperative monitoring Training, Alger, Algeria, 2015
- 6. Intraoperative neuromonitoring. 4th Middle East Spine Society Congress, Rabbat, Morroco, 2017
- 7. Medtronic sponsored Neuro-intraoperative monitoring Training, Rabat, Morroco, 2017
- 8. Medtronic sponsored Neuro-intraoperative monitoring Training, Dubai, UAE, 2017
- 9. Medtronic sponsored Neuro-intraoperative monitoring Training, Amman, Jordan, 2017
- 10. tDCS as a prophylactic treatment for migraine. tDCS Sooma day, Helsinki, Finland, 2018
- 11. SIDRA Neurointraoperative monitoring training, Beirut, 2018

References:

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