Pr. Mirna N. CHAHINE

NAME / TITLE:

Mirna Chahine is a full-time Professor of Cardiovascular Physiology & Head of Basic Sciences Department at the Faculty of Medical Sciences, Lebanese University in Beirut, Lebanon.

• EDUCATIONAL BACKGROUND:

- ➤ She obtained her BSc degree in 1999 in Medical Analysis Laboratory Sciences from the Lebanese University, Faculty of Public Health section II, Fanar, Lebanon. Her BSc project consisted of studying type I diabetic patients.
- ➤ She then expanded her knowledge by studying host-pathogen interaction on molecular and cellular levels and obtained a certificate of MSc in Biological and Medical Sciences from St Joseph University (USJ) Faculty of Medicine; Her thesis was about the adherence of Plasmodium falciparum-infected erythrocytes on endothelium;
- ➤ She had her PhD in 2006 in Cell Biology on Hereditary Cardiomyopathy from Sherbrook University, Canada.
- ➤ She then completed her post-doctorate trainings in Canada (Winnipeg, MB), then the UK (London) from 2006 to 2012 on nuclear protein import in Cardiovascular diseases (Hypertension, Atherosclerosis, hypertrophic cardiomyopathy, Heart failure).
- > She also obtained a diploma in Higher Education Teaching from Canada in 2009.

SUMMARY OF CAREER TO DATE:

"My father had his first heart attack at age of 37 followed by another one at 42! This was sufficient to shape my world view and strengthen my decision toward doing research on cardiovascular diseases".

In 2001, I was accepted as a PhD candidate at University of Sherbrooke, Quebec, Canada, in the laboratory of Prof. Ghassan Bkaily, where I examined the role of nuclear membranes ionic transporters such as the Sodium Proton Exchanger (NHE-1) in the development of calcium and sodium overload in a model of hereditary cardiomyopathy (hCMP) (hamster: Line UM-X7.1) The results of these studies were published in 2005 and 2006 and this granted me a doctoral research award from the Heart and Stroke Foundation of Canada (HSFC). During my PhD studies, I published 4 articles.

In 2006, I joined the laboratory of Prof. Grant Pierce, for my postdoctoral training, at University of Manitoba, Winnipeg, Canada, where I studied nuclear

protein import (NPI) in atherosclerosis by exposing the cells to oxidized LDL. This work was published in 2009 and granted me the 1st place during the 2008 Young Investigator Award competition from the International Society for Heart Research (ISHR) in Athens, Greece. In addition, I investigated the synergistic effects of oxidized LDL on the capacity of infection with pathogens such as *Chlamydia pneumoniae* and with cell stretch (to mimic hypertension) to alter cell proliferation. During my first post-doctoral studies with Prof Pierce, I published 9 articles and 2 book chapters. By that time, I was a fellow of the HSFC. In 2009, I received a Young Investigator award for excellence in post-doctoral research, and in 2010 the award for best paper, both from the Institute of Cardiovascular Sciences in Winnipeg.

Furthermore, in March 2009 I completed a Certificate in Higher Education Teaching at the University of Manitoba.

In January 2010, I chose to move to Europe and particularly to the Imperial College London, London, UK, to conduct my 2nd for my postdoctoral training, where I was offered the prestigious "Newton International fellowship" offered by the Royal Society, and Prof. Sian Harding, a very well-known scientist in the field of the failing human heart, sponsored me. I was particularly intrigued to determine the factors implicated in the maturation of a Cardiomyocyte (CM). I also investigated the NPI in human Embryonic Stem cells-derived CM (hESC-CM). These results were published in Cardiovascular research journal (the article was also selected as the editor's choice).

In June 2012, I got recruited by Prof. Roland Asmar at the Foundation – Medical Research Institutes (F-MRI) as the principal coordinator of epidemiological studies, modules for university diplomas students (MDs, dentists, pharmacists), and Continuous Medial education (CMEs) in the field of Cardio-metabolic diseases in the entire MENA region, as well as the director of the Basic Medical Research in the F-MRI.

On fall 2013, I directed a project entitled "Tissue regulation of telomeres' length (TL)- Simultaneous study on telomeres' length in different tissue types", in collaboration with the CHU de Nancy, France (Prof. Athanase Benetos) and the University of New Jersey, USA (Prof. Abraham Aviv) and the Lebanese University and F-MRI®. This work was presented during different international meetings and was published in 2019.

I also managed through the F-MRI two Epidemiological projects about the "Prevalence" and the "Management" of Cardiovascular Diseases overall Lebanon. This work got published in 10 articles.

At the University of Balamand, since 2013 I have been co-supervising a student (Amany Chahine) with Dr Marc Karam and Surrey University UK on a project entitled "The effect of Leishmania major infection on atherogenesis

and cytokine responses in resistant and susceptible mice", for her MSc and her PhD studies.

During that time period, in September 2012, I was appointed as a part-time lecturer in 3 universities (Lebanese University, University of Balamand, and Lebanese American University).

In October 2014, I obtained a tenured *Associate Professor position* in Physiology (Research & Teaching Position) at the Faculty of Medical Sciences, in Beirut, Lebanon. During that time period, I carried on with my research about basic science (telomeres/ molecular and cellular levels of cardiometabolic diseases), epidemiological studies, and Blood pressure measurement devices validation on the Lebanese population. Certainly, I kept my collaborations with other local universities (Balamand university in Lebanon) and international ones (Greece, France, UK).

In July 2018, I was promoted for a tenured *Professor position* in the same faculty (Research and Teaching position). Since then, I have been directing many projects as summarized in the last pages of my CV (tables).

• RESEARCH INTERESTS AND SPECIALTY:

- 1. Gender Differences at the level of Telomere length in Human health and cardio-metabolic diseases,
- 2. The effect of Leishmania major infection on atherogenesis and cytokine responses in resistant and susceptible mice.
- 3. Gender Differences at the level of CVD Symptoms, CVD pattern, Chest pain origin, CVD treatments and Cancer.
- 4. Epidemiological studies (Cigarettes smoking & Vaping prevalence, KAP Hypertension, Diabetes, & Hypertension management by Lebanese physicians, COVID-19 awareness in general population / Pregnant women/ Patients with Chronic diseases)
- 5. Drug-Drug interactions
- 6. Projects for Accreditation of the faculty (Research performance/Assessments/syllabi, Transition to clinical settings).
- 7. Validation of blood pressure measurement devices on the Lebanese population according to international guidelines;

• MAJOR ACCOMPLISHMENTS:

- FELLOWSHIPS: from Heart & Stroke Foundation of Canada (2005, 2007) and "the Newton International Fellowship" from the British Royal Society (2009); -GRANTS: "British Heart Foundation" Project Grant (Imperial College, London) (2012); National Council for Scientific Research project Grant (Beirut,

- Lebanon) (2015); Wael Al-Mahmeed & IAS Research Training Grants and Fellowships for the MENA Region: 1st place research award (2019).
- -PRICES AND AWARDS: Young Investigator Award from the International Society for Heart research (2008); Award for Best Paper in Cardiovascular Sciences (2010).
- -Pr. Chahine has published around 42 peer-reviewed papers, and 3 book chapters.

LIST OF PUBLICATIONS:

Full papers published in peer-reviewed journals.

- 1. Battoul Fakhry, Mostafa Abdulrahim, **Mirna N Chahine**. Medical Cannabis in Lebanon: History & Therapeutic, Ethical, and Social Challenges. A Narrative Review. Archives of Clinical and Biomedical Research. 2021;5:137-157.
- 2. **Mirna N. Chahine**, Souad Bou Harb, Abed El Rahman Saad, Patrick Sarkis, Alaa Azaki, Aya Harb, Ali Allouch, And Roland Asmar. Validation of the PHILIPS DL8760[®] upper arm blood pressure monitor, in oscillometry mode, for self-measurement in a general population, according to the European Society of Hypertension International Protocol revision 2010. Blood Press Monit. 2021 Mar 1. Epub ahead of print.
- 3. Ali IB, Farah R, Zeidan RK, **Chahine MN**, Al Sayed G, Asmar R, Hosseini H, Salameh P. Stroke symptoms impact on mental and physical health: A Lebanese population-based study. Revue Neurologique. 2021: 177(1-2):124-131.
- 4. Jeannot Kekedjian, Raymond Challita, Mikael Abi Abdallah, Roland Asmar, **Mirna N Chahine.** Demographic and Clinical Characteristics of Hypertensive and/or Diabetic Patients with Target Organ Damage in the Lebanese Population. Archives of Clinical and Biomedical Research. 2020; 4: 361-377.
- 5. Jeannot Kekedjian, Raymond Challita, Mikael Abi Abdallah, **Mirna N Chahine,** Roland Asmar. Management of Hypertension and Diabetes Mellitus in Patients with Target Organ Damages and/or Previous Cardiovascular Diseases in Lebanon. Where do We Stand with Respect to International Guidelines? Cardiology and Cardiovascular Medicine. 2020; 4:679-696.
- 6. Diana Carolina Awad, Aline Zaiter, Peter Ghiya, Karine Zaiter, Jean G Louka, Chadi Fakih, **Mirna N Chahine.** COVID-19: Pregnant Women's Knowledge, Perceptions & Fears. First National Data from Lebanon. Obstetrics and Gynecology Research. 2020; 3:220-234.
- 7. Halawi A, Ghazal M, Cherry H, Hanna PA & **Chahine MN.** Knowledge, perception and precautions of the Lebanese population regarding the novel Coronavirus outbreak: A cross-sectional study between 18 and 22 March 2020. Journal of Public Health and Diseases. 2020 Jun 30:3(3): 72-81.
- 8. **Mirna N. Chahine,** Simon Toupance, Sandy El-Hakim, Carlos Labat, Sylvie Gautier, Toufic Moussallem, Pierre Yared, Roland Asmar, And Athanase Benetos. Telomere Length And Age-Dependent Telomere Attrition. The Blood-and-Muscle. Accepted in Can. J. Physiol. Pharmacol. 2019; 97 (4), 328-334.
- 9. Salameh P, Zeidan RK, Hallit S, Farah R, **Chahine M,** Asmar R, Hosseiny H. Cardiovascular Diseases and Long Term Self-Reported Exposure to Pollution: Results

- of a National Epidemiological Study in Lebanon. Journal of Cardiopulmonary Rehabilitation and Prevention 2019; 39 (1), 43-49.
- 10. Salameh P, Farah R, Hallit S, Zeidan RK, **Chahine MN,** Asmar R, Hosseini H. Self-reported history of stroke and long-term living conditions near air pollution sources: resultsof a national epidemiological study in Lebanon. Environ Monit Assess. 2018;190(3):153-164.
- 11. Justin F. Deniset, Thomas E. Hedley, Marketa Hlavackova, **Mirna N. Chahine**, Elena Dibrov, Kim O'Hara, Graham Maddaford, David Nelson, Thane Maddaford, Robert Frandrich, Elissavet Kardami, and Grant N. Pierce. Heat shock protein 60 involvement in vascular smooth muscle cell Proliferation. Cellular Signalling. 2018; 47 (2018): 44–51.
- 12. Michelle Cherfan, Jacques Blacher, Roland Asmar, **Mirna N. Chahine**, Rouba K. Zeidan, Rita Farah, Pascale Salameh. Prevalence and Risk Factors of Hypertension: a Nationwide Cross-Sectional Study in Lebanon. J. Clin Hypertens. 2018;20(5):867-879.
- 13. **Chahine M.N.,** Bou Harb S., El Rahman Saad A., Sarkis P., Azaki A., Allouch A. and Asmar R. Validation of the PHILIPS DL8760, oscillometric, upper arm blood pressure monitor, for self-measurement in general population, according to the European Society of Hypertension International Protocol revision 2010. [Internet]. Dublin: dabl Educational Trust; 2017 July 31. Available from: http://www.dableducational.org/Publications/2017/ESH-IP 2010 Validation of PHILIPS DL8760.pdf
- 14. Pascale Salameh, **Mirna Chahine**, Souheil Hallit, Rita Farah, Rouba Karen Zeidan, Roland Asmar, Hassan Hosseiny. Hypertension prevalence and living conditions related to air pollution: results of a national epidemiological study in Lebanon. <u>Environ Sci Pollut Res Int.</u> 2018;25(12):11716-11728.
- 15. **Chahine MN,** Topouchian J, Zelveian P, Hakobyan Z, Melkonyan A, Azaki A, Diab R, Harb A, Asmar R. Validation of BP devices the QARDIOARM® in the general population and the OMRON M6 Comfort® in Type II Diabetic Patients according to the European Society of Hypertension International Protocol (ESH-IP). Medical Devices: Evidence and Research. 2017;11:11–20
- 16. Azaki A, Diab R, Harb A, Asmar R, **Chahine MN.** Questionable accuracy of home blood pressure measurements in the obese population Validation of the Microlife WatchBP O3® and Omron RS6® devices according to the European Society of Hypertension-International Protocol. Vascular Health and Risk Management. 2017;13:61-69
- 17. Rouba Karen Zeidan, Rita Farah, **Mirna N Chahine**, Roland Asmar, Hassan Hosseini, Pascale Salameh, Atul Pathak. Prevalence and Correlates of Coronary Heart Disease: First Population-based Study in Lebanon. Vascular Health and Risk Management 2016;12:75–84.
- 18. Rita Farah, Rouba Karen Zeidan, **Mirna N. Chahine**, Roland Asmar, Ramez Chahine, Pascale Salameh, Atul Pathak, Hassan Hosseini. Predictors Of Uncontrolled Blood Pressure In Treated Hypertensive Individuals: First population-based study in Lebanon. The Journal of Clinical Hypertension 2016;18(9):871-877
- 19. Rita Farah, Rouba Karen Zeidan, **Mirna N. Chahine**, Roland Asmar, Ramez Chahine, Pascale Salameh, and Hassan Hosseini. Prevalence of Stroke Symptoms among stroke free residents: First National Data From Lebanon. *International Journal of Stroke 2015:* 10 (Suppl A100):83-88.

- 20. Ghassan Bkaily, **Mirna Chahine,** Johny Al-Khoury, Leavon Avedanian, Norbert Beier, Wolfgang Scholz, and Danielle Jacques. Na+/H+ Exchanger inhibitor prevents early death in hereditary cardiomyopathy. *Canadian Journal of Physiology and Pharmacology* 2015;93(11):923-934.
- 21. **Mirna N. Chahine,** Nathalie Assemaani, Ghada Sayed-Hassan, Mariam Cham, Pascale Salameh, Roland Asmar. Validation Of The OMRON M3500 Blood Pressure Measuring Device Using Normal- and High-Speed Modes in Adult And Specific Populations (Obese And Children) According to AAMI Protocol. *The Journal of Clinical Hypertension (Greenwich*) 2015; 17(8):622-629
- 22. **Mirna N. Chahine**, Maxime Mioulane, Markus B. Sikkel, Peter O'Gara, Cristobal G. Dos Remedios, Grant N. Pierce, Alexander R. Lyon, Gàbor Főldes, and Sian E. Harding. Nuclear pore rearrangements and nuclear trafficking in cardiomyocytes from rat and human failing hearts. *Cardiovascular Research* 2015;105(1):31–43. (*Editor's choice)
- 23. Jirar Topouchian, Davide Agnoletti, Jacques Blacher, Ahmed Youssef, **Mirna N. Chahine**, Isabel Ibanez, Nathalie Assemani, Roland Asmar. Validation of four devices: Omron M6 Comfort, Omron HEM-7420, Withings BP-800, and Polygreen KP 7670 for home blood pressure measurement according to the European Society of Hypertension International Protocol. *Vascular Health and Risk Management* 2014;10:33-44.
- 24. **Mirna N Chahine**, Elena Dibrov, David P Blackwood, and Grant N Pierce. Oxidized LDL enhances stretch-induced smooth muscle cell proliferation through alterations in nuclear protein import. *Canadian Journal of Physiology and Pharmacology* 2012;90(12):1559-1568
- 25. **Mirna N Chahine,** Justin Deniset, Elena Dibrov, Satoru Hirono, David P Blackwood, Jose Alejandro Austria and Grant N Pierce. Oxidized LDL promotes the mitogenic actions of *Chlamydia pneumoniae* in vascular smooth muscle cells, *Cardiovascular Research* 2011;92(3):476-483.
- 26. **Mirna N Chahine** and Grant N Pierce. Therapeutic Targeting of Nuclear Protein Import in Pathological Cell Conditions. *Pharmacological Reviews 2009;*61(3):358–372.
- 27. A Patenaude, D Rodriguez-Leyva, AL Edel, E Dibrov, CMC Dupasquier, JA Austria, MN Richard, **MN Chahine**, LJ Malcolmson, GN Pierce. Bioavailability of α-linolenic acid from flaxseed diets as a function of the age of the subject, *European Journal of Clinical Nutrition 2009*; 63:1123-1129.
- 28. **Mirna N Chahine,** David P Blackwood, Elena Dibrov, Melanie N Richard, Grant N Pierce. (2009) Oxidized LDL affects smooth muscle cell growth through MAPK-mediated actions on nuclear protein import. *Journal of Molecular and Cellular Cardiology* 46(3):431-441.
- 29. J.Alejandro Austria, Melanie N. Landry, **Mirna N. Chahine**, Andrea L. Edel, Linda J. Malcolmson, Chantal M.C. Dupasquier, and Grant N. Pierce. (2008) Bioavailability of Alpha-Linolenic Acid in Subjects after Ingestion of Three Different Forms of Flaxseed. *Journal of the American College of Nutrition* 27(2): 214-221.
- 30. Randolph S. Faustino, Paul Cheung, Melanie N. Richard, Elena Dibrov, Annette L. Kneesch, Justin F. Deniset, **Mirna N. Chahine**, Kaitlin Lee, David Blackwood, and Grant N. Pierce. (2008) Ceramide regulation of nuclear protein import. *Journal of Lipid Research*, 49: 654-662.

- 31. A. Al-Khalifa, T.G. Maddaford, **M.N. Chahine**, J.A. Austria, A.L. Edel, M.N. Richard, B.P. Ander, N. Gavel, M. Kopilas, R. Ganguly, R. Ganguly, P.K. Ganguly, and G.N. Pierce, (2007) Effect of dietary hempseed intake on cardiac ischemia-reperfusion injury, *American Journal of Physiology- Regulatory Integrative and Comparative Physiology* 292: R1198-R1203.
- 32.Al-Khoury J., Bkaily G., **Chahine M.,** Jacques D., and D'Orléans-Juste P., (2006), ET_B receptor dependent alteration in aortic responses to ET-1 in the cardiomyopathic hamster, *Can. J. Physiol. Pharmacol.*, 84(9): 787-794.
- 33.**Chahine M.,** Bkaily G., Nader M., Al-Khoury J., Jacques D., Beier N., and Scholz W., (2005) NHE-1-dependent intracellular sodium overload in hypertrophic hereditary cardiomyopathy: prevention by NHE-1 inhibitor, *J. Mol Cell Cardiol.*, 38(4): 571-582.
- 34. Jacques D., Bkaily G., Jasmin G., D'Orléans-Juste P., and **Chahine M.** (2003), Isradipine prevents the development of spontaneously occurring cardiac necrosis in cardiomyopathic hamster, *Canadian Journal of Physiology and Pharmacology*, 81(2): 120-124.

Books and Book Chapters

- 1- Sacre H, Hajj A, Aoun R, Hallit S, Hallit R, **Chahine M,** Daou M, Hachem, R, Salameh P Health professions in Lebanon Education, Practice and Research In Health professions in the Middle East: Chapter 1: Medicine education, practice and research in Lebanon: Clara Rahme, **Mirna Chahine,** Souheil Hallit, Hala Sacre, Pascale Salameh. Springer publications January 2020.
- **2-Mirna N Chahine.** (2008) Nuclear protein import- A target for oxidized LDL to achieve changes in cell growth, *Heart Views and News*, 16(2):12-1.
- **3-**Chantal M.C. Bassett, Richelle S. McCullough, Justin F. Deniset, Andrea L. Edel, Andrew Francis, Delfin Rodriguez-Leyva, **Mirna N. Chahine** and Grant N. Pierce. (Feb 2012). The pathophysiology of coronary artery disease: Impact of dietary polyunsaturated fatty acids. In functional foods and cardiovascular disease, edited by Mohammed H. Moghadasian; N.A. Michael Eskin, CRC Press. 296Pages. https://books.google.com.lb/books?id=RWDMBQAAQBAJ&lpg=PP1&pg=PP1#v=one page&q&f=false

Peer-reviewed publications to be submitted within the next month:

- 1. Diana Carolina AWAD, Aline ZAITER, Battoul FAKHRY, Layal OLAYWAN, Jean G. LOUKA, Marc MACHAALANI, Kassem FARHAT, Youssef RAHMEH, Peter GHIYA, Juliano HADDAD, Ahmad HALAWI, Hassan CHERRY, Mohammad GHAZAL, Rim CHEHAB, Bachir ATALLAH, Nadine YARED, Wadih NAJA, and **Mirna N. CHAHINE***. COVID-19: Knowledge, perceptions, precautions and fears among patients with mental disorders. First National Survey from Lebanon. (To be submitted)
- 2. Battoul FAKHRY, Layal OLAYWAN, Aline ZAITER, Marc MACHAALANI, Jean G. LOUKA, Diana Carolina AWAD, Kassem FARHAT, Youssef RAHMEH, Peter GHIYA, Juliano HADDAD, Ahmad HALAWI, Hassan CHERRY, Mohammad GHAZAL, Bachir ATALLAH, Soulaima CHAMAT, Hanadi SALIBA, Wadih NAJA, Alfred DIB, Joe Zein,

- Wajdy ABI SALEH, Nadine YARED, and **Mirna N. CHAHINE***. COVID-19: Knowledge, perceptions, precautions & fears among patients with Asthma First national survey from Lebanon. (To be submitted)
- 3. Battoul FAKHRY, Layal OLAYWAN, Aline ZAITER, Marc MACHAALANI, Jean G. LOUKA, Diana Carolina AWAD, Kassem FARHAT, Youssef RAHMEH, Peter GHIYA, Juliano HADDAD, Ahmad HALAWI, Hassan CHERRY, Mohammad GHAZAL, Ahmad El-Lakis, Bachir ATALLAH, Soulaima CHAMAT, Hanadi SALIBA, Wadih NAJA, Alfred DIB, Joe Zein, Wajdy ABI SALEH, Nadine YARED, and **Mirna N. CHAHINE***. COVID-19: Knowledge, perceptions, precautions & fears among patients with chronic obstructive pulmonary diseases (COPD). First national survey from Lebanon. (To be submitted)
- 4. Marc MACHAALANI, Kassem FARHAT, Juliano HADDAD, Battoul FAKHRY, Youssef RAHMEH, Peter GHIYA, Diana Carolina AWAD, Aline ZAITER, Jean G. LOUKA, Layal OLAYWAN, Ahmad HALAWI, Hassan CHERRY, Mohammad GHAZAL, Mustapha SAHILI, Bachir ATALLAH, Wadih NAJA, Elie CHAMMAS, Roland ASMAR, Nadine YARED, and **Mirna N. CHAHINE***COVID-19: Knowledge, perceptions, precautions & fears among patients with Cardiovascular diseases. First national survey from Lebanon. (To be submitted)
- 5. Marc MACHAALANI, Battoul FAKHRY, Youssef RAHMEH, Peter GHIYA, Diana Carolina AWAD, Juliano HADDAD, Jean G. LOUKA, Kassem FARHAT, Aline ZAITER, Layal OLAYWAN, Ahmad HALAWI, Hassan CHERRY, Mohammad GHAZAL, Tia EL-KAZZI, Bachir ATALLAH, Layal YAGHI, Wadih NAJA, Roland ASMAR, Charles SAAB, Nadine YARED, and **Mirna N. CHAHINE*.** COVID-19: Knowledge, perceptions, precautions & fears among patients with Metabolic diseases. First national survey from Lebanon. (To be submitted)
- 6. Juliano HADDAD, Marc MACHAALANI, Battoul FAKHRY, Youssef RAHMEH, Peter GHIYA, Kassem FARHAT, Jean G. LOUKA, Diana Carolina AWAD, Aline ZAITER, Layal OLAYWAN, Ahmad HALAWI, Hassan CHERRY, Mohammad GHAZAL, Mustapha SAHILI, Bachir ATALLAH, Layale YAGHI, Wadih NAJA, Roland ASMAR, Robert NAJEM, Nadine YARED, and **Mirna N. CHAHINE***. The CKD COVID-19 interplay. COVID-19: Knowledge, perceptions, precautions & fears among patients with Metabolic diseases. First national survey from Lebanon. (To be submitted)
- 7. Battoul FAKHRY, Marc MACHAALANI, Ahmad HALAWI, Hassan CHERRY, Mohammad GHAZAL, Diana Carolina AWAD, Aline ZAITER, Layal OLAYWAN, Jean G. LOUKA, Kassem FARHAT, Youssef RAHMEH, Peter GHIYA, Juliano HADDAD, Hadi Shammaa, Emmanuel Eid, Bachir ATALLAH, Soulaima CHAMAT, Hanadi SALIBA, Layal YAGHI, Wadih NAJA, Fadi NASR, Nadine YARED, and **Mirna N. CHAHINE***. COVID-19: Knowledge, perceptions, precautions & fears among Cancer patients. First national survey from Lebanon. (To be submitted)
- 8. Jean G. LOUKA, Battoul FAKHRY, Diana Carolina AWAD, Aline ZAITER, Layal OLAYWAN, Marc MACHAALANI, Kassem FARHAT, Youssef RAHMEH, Peter GHIYA, Juliano HADDAD, Ahmad HALAWI, Hassan CHERRY, Mohammad GHAZAL, Reem

CHEHAB¹, Bachir ATALLAH, Hanadi SALIBA, Soulaima CHAMAT, Wadih NAJA, Joseph EL KHALIL, Raja CHAFTARI, Nadine YARED, and **Mirna N. CHAHINE*.** COVID-19: Knowledge, perceptions, precautions, and fears among patients with Musculoskeletal conditions. First national data from Lebanon. (To be submitted)

9. **Mirna N. CHAHINE***, Battoul FAKHRY, Marc MACHAALANI, Diana Carolina AWAD, Bachir ATALLAH, Wajdy ABI SALEH, Alfred DIB, Charles SAAB, Elie CHAMMAS, Fadi NASR, Robert NAJEM, Joseph EL KHALIL, Raja CHAFTARI, Wadih NAJA, Nadine YARED, and Roland ASMAR. COVID-19: Knowledge, perceptions, precautions, and fears among patients with Chronic Diseases. First national data from Lebanon. (To be submitted)

Refereed Conference Publications

- 1- **Mirna N. Chahine**, Rouba K. Zeidan, Rita Farah, Pascale Salameh, And Roland Asmar. Gender Differences In Cardiovascular Diseases In A Cross-Sectional Lebanese Study. OSSD Washington USA 5th To 8th May 2019. Gender And The Genome.2019;3:1-78 (Pp 60-61).
- 2- S. Toupance, **M. Chahine,** I. Tzanetakou, C. Labat, S. Gautier, C. Lakomy, PM Rossi, T. Moussallem, P. Yared, D. Quilliot, E.Menenakos, R. Asmar, A. Benetos. Telomere Dynamics Relation With Obesity. Presented During The Eugms In Berlin Germany October 10th Ot 12th 2018, Artery Research 2018;24:120.
- 3- S. Toupance, I. Tzanetakou, **M. Chahine,** P. Konstantopoulos, S. Gautier, M. Korou, C. Lakomy, I. Doulamis, C. Labat, A. Gkogkos, R. Asmar, D. Perrea, A. Benetos. Longueur Des Télomères Et Attrition Télomérique Dans Les Contextes De Stress Oxidant Et D'inflammation Chroniques. Presented During The 37eme Journée Annuelles De La Société Française De Gériatrie Et Gérontologie, Paris, France From 27 To 29 Novembre 2017, L'Année Gérontologique, 2017; 31 (Tome II):3 (O1-1).
- 4. S. Toupance, I. Tzanetakou, **M. Chahine,** P. Konstantopoulos, S. Gautier, M. Korou, C. Lakomy, I. Doulamis, C. Labat, A. Gkogkos, N. Settembre, T. Moussallem, K. Perreas, L. Frimat, P. Yared, E.Menenakos, J. Hubert, M.Vasiloglou, S.Malikov, R. Asmar, D. Perrea, A. Benetos. Telomere length and telomere attrition in chronic oxidative stress and inflammation. Presented during the EUGMS in Nice, France from 20 to 22 Septembre 2017, European Geriatric Medicine 8S1:S40-S247 (S2017-P581).
- 5. R Farah, RK Zeidan, **M Chahine,** R Chahine, P Salameh, H Hosseini. Prevalence of stroke symptoms among stroke-free residents: national data from Lebanon EUROPEAN JOURNAL OF NEUROLOGY 2015;22:208.
- 6. **M Chahine**, N Assemaani, G Sayed-Hasan, M Chami-Chebbo, Roland Asmar. Validation Of The Omron (R) M3500 Blood Pressure Measuring Device In The Adult

- And Specific Populations (Obese And Children) According To The Aami Protocol Journal of Hypertension 2015;33:e412
- 7. G Foldes, M Mioulane, MN Chahine. Images in cardiology. Heart 2013;99:972
- **8. MN Chahine,** M Mioulane, G Földes, A Lyon, SE Harding. Nuclear Protein Import as the Missing Link in Phenylephrine-Induced Cardiomyocyte Hypertrophy. Circulation Research 2011;109 (suppl_1), AP217-AP217.
- 9. G Foldes, M Mioulane, **M Chahine**, M Schneider, S Harding. Human induced pluripotent stem cell-derived cardiomyocytes serve as in vitro model of cardiac hypertrophy. Heart 2011;97(20):5.
- **10- M.N. Chahine**, M. Mioulane, G. Foldes, A. Lyon, N.N. Ali, M.D. Schneider, Grant N. Pierce, and S.E. Harding. Altered nuclear protein import in Phenylephrine induced hypertrophy in adult and human embryonic stem cell-derived cardiomyocytes by comparison to failing human cardiomyocytes. Winnipeg Heart International Conference, Winnipeg, MB, Canada, 13 16 October 2011 (accepted in Exp Clin Cardiol.).
- 11- **M.N. Chahine**, M. Mioulane, G. Foldes, A. Lyon, and S.E. Harding. Exposure of Adult rat cardiomyocytes to Phenylephrine alters nuclear protein import and cell hypertrophy. Basic Cardiovascular Sciences 2011 Scientific Sessions: From Concept to Clinic Leading Translational Cardiovascular Science, New Orleans, USA, Jul 18-21,2011. *Heart* 2011;**97**:e7.
- 12- G. Foldes, M. Mioulane, **M.N. Chahine**, M.D. Schneider, and S.E. Harding, IPSC BSCR/BAS Joint Spring Meeting: "Stem Cells and Cardiovascular Disease from Promise to Reality", Manchester Central, UK, 13 14 June 2011, *The Bulletin* of the British Society of Cardiovascular research, Vol 24 no 2, 2011.
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