

Foundation – Medical Research Institutes

Activities Report 2012

Pr. Roland Asmar Chairman

Date:

Signature:

This document is confidential for your strict personal use.

Foundation – Medical Research Institutes Email: info@f-mri.org; Web: www.f-mri.org

CONTENTS

- Summary
- The F-MRI project: main issues
- Medical research education
 - University Diploma: "Principles of Medical Research"
 - Professional Certificate: "Clinical Research Assistant"
- Research
 - Clinical Research
 - Other Research
- Continuous Medical Education (CME)
- Future Perspectives
 - Education
 - Research
 - CME
- Appendixes

Summary

Research, especially in the Health area, represents a major issue with respect to the economic and social development of a country and even a region. All actors in the field meet particular interest in that development: patients, universities, hospitals, practitioners, researchers and industries. In this regard, the medical research progressing deserves much attention.

The Foundation - Medical Research Institutes established in 2009-2010 as public utility non-for-profit organization in Geneva (Switzerland), and implemented officially in the Middle East in 2010-2011. It designed its project entitled "Development of Academic Medical Research in the Middle East" with academic and interuniversity prospects to bring a significant contribution to the development of medical research and continuing medical education in the Middle-East region.

The first "Activities Report" reported the essential activities undertaken by the Foundation in 2010-2011; they were classified according to the initial plan of the project described in the Foundation brochure, namely: administration, academic education, research units, research projects, public health and others.

This second "Activities Report" reports the main activities which have been continued and/or initiated by the F-MRI in 2012.

Overall, despite issues related to the political and security situation in the region, the activities undertaken during 2012 were satisfactory. Particularly, it should be noted that the academic teaching of medical research undertaken by the Foundation in collaboration with the Lebanese University has met unlimited success. In addition, one clinical research unit has been established in an academic hospital during 2012. The future perspectives for 2013 are also described.

The Foundation-Medical Research Institutes

Main Issues

The Foundation - Medical Research Institutes (F-MRI): Governance*

The Foundation - Medical Research Institutes (F-MRI, Geneva Switzerland), is a public utility nonfor-profit organization registered in Geneva, regulated by the Swiss law. This organization chaired by its President and founder, Prof Roland Asmar has been established in 2009 and officially recognised in 2010. It is registered with the trade and placed under the control of the supervisory authority of the Federal Department of Home Affairs in Bern, Switzerland.

Headquarter: The Foundation's headquarters location is: Place Saint Gervais 1, Po Box 2049, 1211 Geneva 1, Switzerland. Tel: +41 22 909 89 00. Fax: +41 22 909 89 39. Email: <u>contact@f-mri.org</u>; Web: <u>www.f-mri.org</u>

Duration: The duration of the Foundation is unlimited.

Resources: The main resources of the foundation are:

- Allowances, donation and bequests,
- Any other source authorized by law, including private donors and public institutions,
- Products of its shares as defined in the aims of the foundation.

Organs of the Foundation: The main bodies of the Foundation are:

- The Board of Trustees,
- The auditors,
- Scientific and other resource Committees.

* Details on the F-MRI governance are provided on the website: www.f-mri.org

Main initial project*:

The initial project of the Foundation entitled:

« Development of Academic Medical Research in the Middle-East »

has been described in details in a specific brochure. Briefly, the main objective of the project is to develop the research activities in medical science in the Mediterranean / Middle-East region. This has been decided after permanent collaboration with various local and international entities: governments, institutions, and universities in order to fill a gap and meet the demand of the involved parties.

Structure of the project: The project has been planned as the progressive **creation in the participant country of a local F-MRI entity**. Each of the local entities is supervised by scientific council and a patronage committee which includes national and international personalities.

Functioning: All respective local F-MRI subsidiaries will develop following a single common design their proper activities according to the specific needs and progressively in four steps:

- Education on medical research
- Creation of clinical research units (CRU), initiation of medical research projects and a research network.
- Communication, Editorial and publishing
- Other issues: public health research projects

* Details of the project are described in specific downloadable brochure from the website

Establishing of Lebanese local F-MRI Entity

In order to operate in Lebanon, the Foundation has established a local independent legal office as a public utility, non-for-profit organization registered in Beirut and regulated by the Lebanese law. This entity chaired by Prof Roland Asmar has been established in 2010 and officially recognised in 2011. It is registered under the control of the supervisory authority of the Ministry of Interior, Lebanon.

Headquarters: The Foundation's Lebanese headquarter is located at: Achrafieh, District Hôtel Dieu 64, street n°1, Olivetti Bldg. Beirut Lebanon. Tel: +961 1 424 027. Fax: +961 1 424 028.

An additional academic office of the Foundation has been also opened al the Faculty of Medicine of the Lebanese University, located at Hadath, Beirut Lebanon. Tel / fax: +961 5 470924. This office has been established after the signature of an agreement between the two entities to develop the university education of Medical research (see specific chapter hereafter).

Creating & Developing a Professional website

A professional website has been registered, created and developed both in English and French languages. It includes the followings:

- Report of the Foundation governance and objectives
- Description of the Foundation mission with the main project
- Education section
- Research section
- Publications with downloadable documents
- Specific restricted student's access pages with downloadable courses

EDUCATION IN MEDICAL RESEARCH

Physician interested in becoming researcher or study investigator must have been trained on medical research principles and methods. He or she will be assisted in this activity by persons belonging also to the medical sphere: the clinical research assistants (CRA) and clinical research technicians (CRT) the role of whom is to follow up a study, to ensure adequate application of good clinical practice, and to verify the quality of data collected in the study.

The Foundation decided to organize this specific education with two levels:

• A university (UD) diploma proposed to post-doctorate students, the objective of which is to introduce future investigators in research fundamentals and related regulatory and technical requirements.

• A professional education recognized by a university certificate, proposed to students having achieved their baccalaureate + three years of higher education, who are interested in becoming clinical research assistant (CRA) or clinical research technician (CRT).

These two university educational levels "clinical research assistant" (CRA) and "clinical research technician" (CRT) have been initiated at the Lebanese University in 2010. These education diploma and certificate welcomed students from various Lebanese universities (see appendixes 1, 2).

The University Diploma "Principles of Medical Research"

The organization of this university diploma involves a collaborative participation of local and regional universities, with the participation of experts from Beirut (Lebanon) but also and principally from Toulouse, Nancy and Paris VI Universities (France) and as well as Cambridge university (United Kingdom). Details on the university diploma: objectives, required qualities, organisation, training, final exam, etc can be obtained from the website.

Since its establishment in 2010, 3 academic years took place with 3 distinct classes; the first two classes were presented in the 2010-2011 activity report. The third class is reported hereafter (see appendixes 1).

NAME	DEGREE	UNIVERSITY
Abou Merhi Bassem	MD	Romania/AUB
Bassil Nadine	MD	UL
Benaicha Mohammed	Pharm D	USJ
Chamoun Kamal	MD	UL
Cherfan Michelle	Pharm D	AUB
Dbouk Rola	Pharm D	BAU
Drouby Fida	Pharm D	LAU
El Khoury Maya	Pharm D	UL
El Masri Sarah	Pharm D	BAU
El Youssef Khaled	MD	UOB
Hanna Philippe	MD	UL
Hassan Rahal	MD	UL
Rammal Ghina	Pharm D	UL
Tawil Samah	Pharm D	LAU
Yassine Hussein	MD	UL
Zaarour Rana	MD	UL

- Academic year 2012-2013: Class "Pierre & Marie Curie " included 16 participants

AUB = American University of Beirut; BAU = Beirut Arab University; UL = Lebanese University; UOB = University Of Balamand; USJ = Saint-Joseph University;

The Professional Certificate of "Clinical Research Assistant"

Similar to the post Doc University diploma, the organisation of this certificate involves experts from local and regional universities: from Beirut (Lebanon), from Toulouse, Nancy and Paris VI Universities (France) as well as Cambridge university (United Kingdom).

Details on the university diploma: objectives, required qualities, organisation, training, final exam, etc can be obtained from the website.

Since its establishment in 2010, 3 academic years took place with 3 distinct classes; the first two classes were presented in the 2010-2011 activity report. The third class is reported hereafter (see appendixes 2).

NOM	DEGREE	UNIVERSITY
Abou Khalil Diana	MSc Pharmacy	USJ
Anouty Zeinab	MSc Microbiology	USJ
Chalhoub Karen	BS Biology	UOB
Fakih Cherine	MSc Agronomy/ Biochemistry	UL
Farhat Soha	BS Pharmacy	BAU
Haddad Rana	BS Nursing	AUB
Haydar Ghina	MSc I Biochemistry	UL
Khalil Cynthia	BS Biology	UOB
Nasser Rania	BS Pharmacy	BAU
Rammal Farah	BSc Pharmacy	BAU
Shbaro Abeer	BS Pharmacy	BAU
Sleiman Hiba	MSc Biochemistry	UL
Slim Tala	BS Biochemistry	UL

- Academic year 2012-2013: Class "Pierre & Marie Curie " included 13 participants

AUB = American University of Beirut; BAU = Beirut Arab University; UL = Lebanese University; UOB = University Of Balamand; USJ = Saint-Joseph University.

RESEARCH

1- Clinical Research

Clinical Research Units (CRUs) are units created within academic hospitals; they are meant to favour and promote the development of clinical research and improve the conditions of clinical study realization. CRUs are responsible for the concrete implementation of the studies, together with the participating investigators; they follow up the study within a monitoring process (quality insurance) with the collaboration of the CRAs. Details on the CRU: objectives, mission, organisation, etc, have been described in the Foundation brochure downloadable from the website. Briefly, the objective of the CRU is to provide logistical and technical support for the conception and realization of study projects within the medical and academic community.

The F-MRI project aims the implementation of distinct URCs within those academic hospitals or institutions having applied and declared their willingness to initiate a research activity. These structures must meet the participation criteria as described in specific documents. They have to apply and fulfil a specific affiliation form. According to the requested criteria, this can be accepted or not by the Foundation.

In 2011, the Foundation had received several demands from various hospitals and institution. After reviewing the corresponding affiliation forms, it has been decided to set-up <u>2 CRUs</u>:

Mount Lebanon Hospital (MLH): This hospital is located in Beirut and affiliated to the Faculty of Medicine of the Lebanese University. It has been recently accredited by the Ministry of Health and the corresponding Institution. This multidisciplinary hospital has several excellence centres mainly in oncology, medical imaging, and endocrinology. The affiliation form has been accepted in July 2011 and the CRU established in October 2011. During 2012, this unit has been involved both in term of initiation and/or management of several clinical studies (cf, hereafter). The CRU team has been confirmed and developed in 2012 and included: a unit director, his head assistant, and three CRAs.

The development of the CRU at MLH included the followings:

- Development of Standard Operating Procedures and initiation of a recruitment process for study coordinators.
- Several contacts and meetings with sponsors and CROs as well as with MLH medical director, units staff and directors in order to present the CRU activities and the possibilities within MLH for interventional trials conduct and to evaluate the clinical research activities.
- Collaboration with MLH purchase and IT departments for provision of utilities and equipments needed for trials coordination.

At the end of Q1 -2012, the CRU was fully operational with <u>4 trials</u> being coordinated by the CRU under the direction of Dr Lena Massad:

- 1- A phase III interventional, multinational, randomized, double-blind, double-dummy study in naive patients with type 2 diabetes
- Study status: Completed
- > Number of patients' status: 4 patients completed the study
- > Duration of study participation per patient: 18 weeks

F-MRI activities to date: Feasibility and set up meetings – discussion of agreement and budget – training on study specific process – coordination of the study and patients management – close collaboration with the CRO and facilitation of the monitoring process – handling trial files and materials - study closure

- 2- A phase III interventional, multinational, open label, non comparative study in patients with inadequately controlled type 2 diabetes
- Study status: Ongoing
- > Number of patients' status: 6 patients currently enrolled
- > Duration of study participation per patient: 27 weeks

F-MRI activities to date: Feasibility and set up meetings – discussion of agreement and budget – training on study specific process – coordination of the study and patients management – close collaboration with the sponsor and facilitation of the monitoring process – handling trial files and materials

- 3- A phase III interventional, multinational, double-blind, double-dummy, randomized study in fasting patients with type 2 diabetes
- Study status: starting
- Number of patients' status: 1 patient pre-screened
- > Duration of study participation per patient: 12 to 26 weeks

F-MRI activities to date: Feasibility and set up meetings – discussion of agreement and budget – training on study specific process – initiation of patients pre-screening - close collaboration with the sponsor - handling trial files and materials

- 4- A phase III interventional, multinational, randomized, double-blind study in naive patients with type 2 diabetes
- Study status: under set-up preparation
- Number of patients' status: Not applicable yet
- > Duration of study participation per patient: 24 weeks

F-MRI activities: Feasibility and set up meetings - discussion of agreement and budget

Lebanese Hospital Geitawi: This hospital is located in Beirut and affiliated to the Faculty of Medicine of the Lebanese University. It has been recently accredited by the Ministry of Health and the corresponding Institution. The affiliation form has been accepted in December 2011 and the CRU is being established and will be operational during 2014.

2- Other Research

A- Technical Research

Assessment of the accuracy of the blood pressure measurements using 3 various methods: Mercury sphygmomanometer, brachial oscillometric device and wrist oscillometric device. Details of the study protocol have been described in specific document. Briefly, the study is performed in adult population according to the International protocol version 2 (2010) of the European Society of Hypertension. The statistical analysis is performed using specific software developed by the International Society of vascular Health and the Foundation. Ambulatory patients from the Mount Lebanon Hospital and various outpatient clinics were included in the study. This study has been possible thanks to collaboration among Asian and European Institutions and The Foundation. It has been ended by 2012, its publication is in press.

B- Epidemiological Studies

The F-MRI participated in the design, realisation, and analysis of an MD thesis entitled: "Prevalence of Diabetes Mellitus among Patients with Essential Arterial Hypertension" during 2012. This thesis has been successfully defended and it has been submitted for publication.

CONTINUOUS MEDICAL EDUCATION

Continuous Medical Education (CME) activities were defined as one of the activities to be developed by the F-MRI. An efficient CME needs to be performed according to a well established methodology. After assessing the need of doctors and researchers, the adapted CME programs is defined and implemented. Moreover, CME activities need to be recognized and accredited by national or international scientific societies or institutions.

In order to develop recognised and accredited CME activities, the Foundation has entered in 2011 an agreement with the "International Society of Vascular Health".

A first experience of CME activity took place in 2011 at a regional level in Istanbul, Turkey. This has been possible thanks to the sponsoring of various pharmaceutical companies and medical device manufacturers. Analysis of the evaluation forms fulfilled by more than 150 participants was very satisfactory and promising.

In 2012, the F-MRI undertook two major CME activities:

- 1- A master class update on clinical research which has been held in collaboration with the Lebanese University in Q3.
- 2- A major CME congress was fully organized by the F-MRI in collaboration with the ISVH in Istanbul in December 2012. Outstanding international speakers of a high calibre participated in this high scientific standard meeting (See Program hereafter). The attendance included 150 participants from several countries of the region. According to the evaluation forms, this CME was a real success (See Evaluation form's results hereafter)



"The 2nd Cardio – Metabolic Meeting in the Middle East"



30'

Final Program

December 1st, 2012- Hilton Hotel - Istanbul, Turkey

9h-10h30: Session 1: Hypertension & other Risk Factors Chairmen: Prof. Roland Asmar (FR) & Prof. Samir Arnaout (LB) A- Guidelines for Hypertension Management Prof. Bernard Waeber (CH) Present & Future

	Present & Future		
B-	Pharmacological treatment of hypertension The role of combination and new perspectives	Prof. Atul Pathak (FR)	30'
			20
C-	New Modalities in type II Diabetes Management	Prof. Wolfgang Schmidt (DE)	30'

10h30 – 11h: Coffee Break

11h – 12h30: <u>Session 2</u>: Global Cardiovascular Risk

Chairmen: Prof. Bernard Waeber (CH) & Prof. Omar Hamoui (LB)

How to evaluate:

A-	Arterial Remodeling	Prof. Roland Asmar (FR)	30'
B-	Cardiac Remodeling	Prof. Giuseppe Germano (IT)	30'
C-	Kidney Abnormalities	Prof. Ali Abu-Alfa (LB)	30'

12h30 – 13h30: Lunch Break

13h30 - 15h: Workshops parallel sessions*- (First Session)

A-	Workshop on Blood Pressure Measurement Clinic – Home – Ambulatory	Prof. Roland Asmar (FR)
B-	Workshop on Target Organ Damages Artery & central BP	Prof. Jirar Topouchian (FR) Mr. Achim Schwarz (DE)
C-	Workshop on Target Organ Damages Cardiac Assessment	Prof. Elie Chammas (LB)
D-	Workshop with Clinical Cases	Prof. Samir Arnaout (LB) Prof. Omar Hamoui (LB)

*NB: Participants can attend successively two different workshops, one during each session.

15h - 15h30: Coffee Break

15h30 – 17h: <u>Workshops – (Second Session)</u> Same program than First Session

Foundation – Medical Research Institutes Email: contact@f-mri.org; Web: www.f-mri.org

Place de Saint-Gervais 1, Boite postale 2049, 1211 Genève 1, Suisse. Tél: +41 22 909 89 00. Fax: +41 22 909 89 39. mri.org Achrafieh, District Hötel Dieu 64, Rue n°1, Olivetti Bldg, Beyrouth, Liban Tél: +961 1 424027. Fax: +961 1 424 028

Cardio-Metabolic Meeting in the Middle-East

Positive feedback on a mix between lectures and workshops



Publications

Several publications were performed in international peer-reviewed journals:

- 1. O'Brien E, Parati G, Stergiou G, Asmar R, et al., European Society of Hypertension position paper on ambulatory blood pressure monitoring. *Accepted in* J. Hypertension.
- Topouchian J, Agnoletti D, Blacher J, Youssef A, Chahine M, Ibanez I, Assemaani N, Asmar R. Validation of four devices for home blood pressure measurements: The Omron M6 Comfort, the Omron HEM-7420, the Withings BP-800 and the Polygreen KP 7670. Publication process.
- Asmar R, Chahine M, Assemaani N, Sayed-Hasan G, Chami-Chabbo M, Salameh P. Validation of the OMRON[®] M3500 blood pressure measuring device using the normal and high speed modes in adult population according to the Association for the Advancement of Medical Instrumentation – ANSI/AAMI/ISO/ 81060-2:2009 Protocol. Publication process.
- Asmar R, Chahine M, Assemaani N, Sayed-Hasan G, Chami-Chabbo M, Salameh P. Validation of the OMRON[®] M3500 blood pressure measuring device using the normal and high speed modes in children population according to the Association for the Advancement of Medical Instrumentation – ANSI/AAMI/ISO/ 81060-2:2009 Protocol. Publication process.
- Stergiou G, Parati G, Asmar A, O'Brien E. Requirements for professional office blood pressure monitors on behalf of the European Society of Hypertension Working Group on Blood Pressure Monitoring. Journal of Hypertension 2012, 30:537–542.
- Cremer A, Butlin M, Codjo L, Coulon P, Ranouil X, Joret C, Coste P, Asmar R, et al. Determination of central blood pressure by a noninvasive method (brachial BP and QKD interval). J Hypertens. 30(8):1533-9, 2012.
- 7. Asmar R. Telmisartan in High Cardiovascular Risk Patients. European Cardiology, 2012;8(1):10-6
- 8. Asmar R. L'hypertension au Coeur du cerveau. Editorial. Circulation, french version. 2011; 11: 371-2.
- Topouchian J, Agnoletti D, Blacher J, Youssef A, Ibanez I, Khabouth J, Asmar R. Validation of three devices using single size cuff for home blood pressure measurements: The Omron M6 Comfort, the Omron HEM-7420 and the Withings BP-800. Submitted for publication.
- Topouchian J, Agnoletti D, Blacher J, Youssef A, Ibanez I, Khabouth J, Khawaja S, Beaino L, Asmar R. Validation of four automatic devices for self-measurement of blood pressure according to the international protocol of the European Society of Hypertension. Vascular Health and Risk Management 2011; 7:709– 17.
- Johnston A, Asmar R, Dahlöf B, Hill K, Jones DA, Jordan J, Livingston M, Macgregor G, Sobanja M, Stafylas P, Rosei EA, Zamorano J. Generic and therapeutic substitution: a viewpoint on achieving best practice in Europe. Br J Clin Pharmacol. 2011; 12;1365-2125.
- 12. Asmar R, Gosse P, Queré S, Achouba A. Efficacy of morning and evening dosing of Amlodipine/ Valsartan combination in hypertensive patients uncontrolled by 5 mg of amlodipine. Blood Press Monit. 2011; 16:80-6.
- 13. Asmar R, Oparil S. Comparison of the antihypertensive efficacy of irbesartan/HCTZ and valsartan/HCTZ combination therapy: impact of age and gender. Clin Exp Hypertens. 2010;32:499-503.
- 14. Parati G, Asmar R, Bilo G, Kandra A, Di Giovanni R, Mengden T. Effectiveness and safety of high-dose valsartan monotherapy in hypertension treatment: the ValTop study. Hypertens Res. 2010;33:986-94.
- Mengden T, Asmar R, Kandra A, Di Giovanni R, Brudi P, Parati G Use of automated blood pressure measurements in clinical trials and registration studies: data from the VALTOP Study. Blood Press Monit. 2010;15:188-94
- Parati G, Stergiou GS, Asmar R, & al. ESH Working Group on Blood Pressure Monitoring. European Society of Hypertension practice guidelines for home blood pressure monitoring. J Hum Hypertens. 2010; 24:779-85.
- 17. O'Brien E, Atkins N, Stergiou G, Karpettas N, Parati G, Asmar R, Imai Y, Wang J, Mengden T, Shennan A; Working Group on Blood Pressure Monitoring of the European Society of Hypertension European Society of Hypertension International Protocol revision 2010 for the validation of blood pressure measuring devices in adults. Blood Press Monit. 2010;15:23-38. Erratum in: Blood Press Monit. 2010;15:171-2.

- Asmar R, Khabouth J, Mattar J, Pecchioli V, Germano G. Validation of three professional devices measuring office blood pressure according to three different methods: the Omron BP10, the Omron HBP T105 and the Pic Indolor Professional.J Hypertens. 2010;28:452-8.
- Germano G, Psimenos A, Sarullo F, Venditti A, Pecchioli V, Asmar R.Validation of four automatic devices for self-measurement of blood pressure according to the International Protocol: the Pic Indolor Personal Check, Comfort Check, My Check and Travel Check.Blood Press Suppl. 2009;1:15-23.
- Asmar R, Khabouth J, Topouchian J, El Feghali R, Mattar J. Validation of three automatic devices for selfmeasurement of blood pressure according to the International Protocol: The Omron M3 Intellisense (HEM-7051-E), the Omron M2 Compact (HEM 7102-E), and the Omron R3-I Plus (HEM 6022-E). Blood Press Monit. 2010; 15:49-54.
- Sie MP, Yazdanpanah M, Mattace-Raso FU, Uitterlinden AG, Hofman A, Hoeks AP, Reneman RS, Asmar R, Van Duijn CM, Witteman JC. Genetic variation in the renin-angiotensin system and arterial stiffness. The Rotterdam Study. Clin Exp Hypertens. 2009;31:389-99.

FUTURE PERSPECTIVES

1- Education

Interuniversity collaboration

The F-MRI is contributing to a twinning or an association in order to initiate a close collaboration between:

- 1- The Lebanese University and the University of Paris XIII.
- The Geitawi Hospital affiliated to the Lebanese University and the Hospital Creteil-Henri 2-Mondor affiliated to University of Paris XIII.

Seminars on medical research

Considering that professional employments are also interested by the research education, the foundation is willing to develop specific modulus and seminars. These seminars will take place during 2-3 days at the end of the week.

2- Research

A- Clinical Research

- 1- CRU: the Foundation is willing to develop one more CRU in the Geitawi academic hospital.
- 2- Trial: A trial is pending, awaiting sponsor's launching decision. It is a phase III interventional, randomized, phase III study in patients after heart valve replacement
 - Study status: pending (awaiting sponsor's decision for launch) .
 - Number of patients' status: Not applicable yet
 - Duration of study participation per patient: 12 months

B- Basic Science Research

We are discussing with the Lebanese University for the opening of a Basic Research Unit with Dr Mirna Chahine as a head of this unit in 2013.

C- Epidemiological Studies

F-MRI is willing to develop in 2013 a large national epidemiological study entitled: "The Cardiovascular Prevalence Lebanese Project" in collaboration with the Faculty of Pharmacy of the Lebanese University. This study will help to estimate the prevalence of the major risk factors in Lebanon.

3- CME

A- Accreditations:

In order to allow the participants of the CME activity to benefit from an European accreditation, the F-MRI will undertake actions to obtain accreditations from the European Board for Accreditation in Cardiology (EBAC).

B- Regional Development:

The F-MRI will continue to develop in collaboration with the ISVH an important regional CME activity.

4- Network

The Foundation will undertake actions to develop the regional and international network among the academic research institutions and persons.

APPENDIXES

- 1- University Diploma Class "Pierre & Marie Curie" Academic year 2012-2013.
- 2- Clinical Research Assistant/ Clinical Research Technician Class "Pierre & Marie Curie" Academic year 2012-2013.

University Diploma « Principles of Medical Research » Class " Pierre & Marie Curie" **Academic Year 2012 – 2013**









Kamal Chamoun



Michelle Cherfan

Philippe Hanna

Rola Dbouk

Rahal Hassan



Fida Drouby

Ghina Rammal



Maya El Khoury



Samah Tawil



Sarah El Masri



Hussein Yassine



Khaled El Youssef



Rana Zaarour









Clinical Research Assistant / Clinical Research Technician « Principles of Medical Research » Class "Pierre & Marie Curie" Academic Year 2012 – 2013



Diana Abou Khalil



Rana Haddad



Zeinab Anouty



Ghina Haydar



Karen Chalhoub



Cynthia Khalil



Cherine Fakih



Soha Farhat



Farah Rammal



Abeer Shbaro



Hiba Sleiman



Rania Nasser

Tala Slim