

Research Report

2005-2010

**Faculty of Health Sciences
American University of Beirut**



November 2010

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EXECUTIVE SUMMARY

The Faculty of Health Sciences (FHS) has attracted substantial funding over the past years. In the 2009-10 academic year (AY), the Faculty was awarded a total of \$1,013,203 for research as *new* grants spanning a duration between three month and three years, making the annual amount of funds *available* for research \$1,776,338, a figure slightly higher than the corresponding amount of \$1,625,533 in 2008-09 (Table 1). The majority of funding available for spending on research was obtained from international and regional sources (92%), a trend which has been consistent for the past four years (Figure 1).

In 2009-10, the total number of publications was 70, out of which 47 were original articles in refereed journals. The latter included only articles. The number of publications in refereed journals has fluctuated in the previous five years from as low as 39 in 2006-07 to 68 in 2005-06. The mean number of articles published in refereed journals per full-time equivalent research active faculty member was 1.9 as compared to 1.4 to 2.5 over the period 2005-10 (Figure 2). The proportion of faculty members who published 2 or more articles in refereed journals was 52 %.

With respect to collaborative research, co-authorship within one department increased from 12.2% in 2008-09 to a current value of 42.6%. During the same period, co-authorship across the five departments at FHS increased from 22% to 30 % but with colleagues outside FHS decreased from 85.4% to 68.1%. Out of the total publications co-authored with colleagues from outside institutions in 2009-10, co-authorship with national or international researchers (28% and 32%, respectively) was higher than that with regional researchers (15%). co-authorship with current or recent graduate students was 34%.The proportion of publications with FHS Faculty as principal authors (first or corresponding) was 72%.

FHS faculty members continue to publish in high quality international refereed journals, with the majority of papers (60%) being published in high quality journals (journals ranking in the top 60%). The percent of publications in journals not ranked by ISI-Citation Index was 23%.

Summary: Facts and Figures

Table 1: Total funding available for spending and new grants in US Dollars in AYs 2008-09 and 2009-10 by source

Funding Source	2008-09		2009-10	
	New grants**	Total available*	New grants**	Total available*
International/Regional	878,462	1,535,709	906,199	1,640,696
Local agencies	154,104	74,104	53,890	82,528
University Research Board (URB)	15,720	15,720	53,114	53,114
Total	1,048,286	1,625,533	1,013,203	1,776,338

* Funds available for spending in the respective year.
 ** New grants awarded to FHS during the year.

Figure 1: Total funding available for spending in US Dollars by source and AY, 2005-10

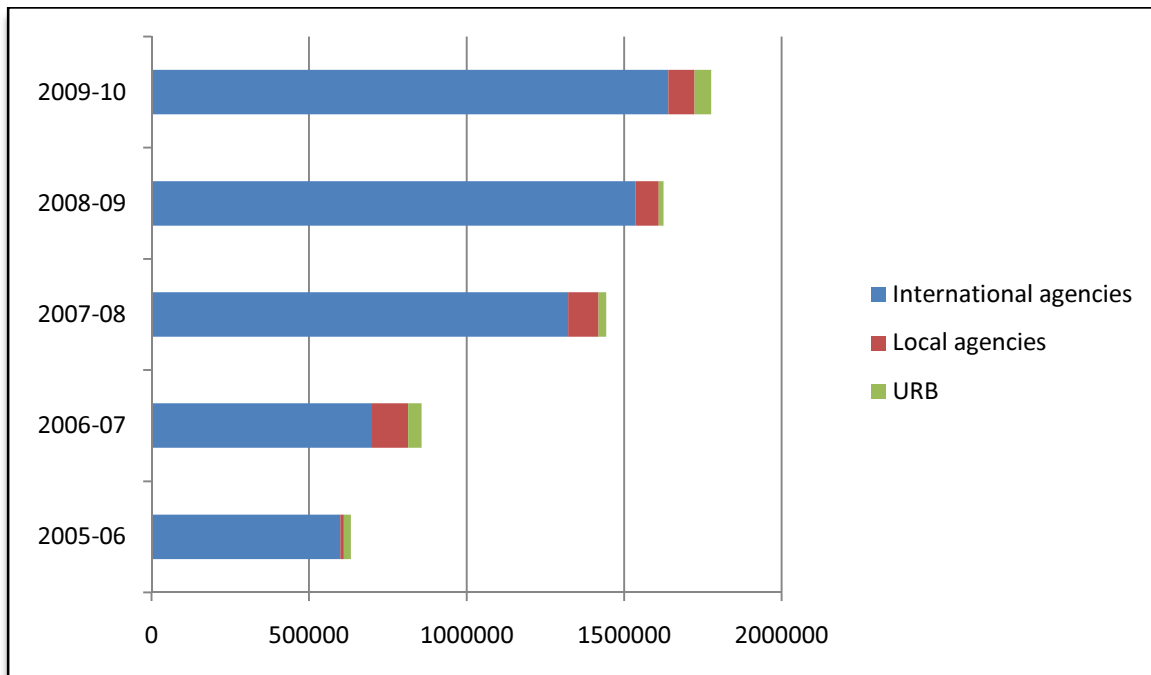
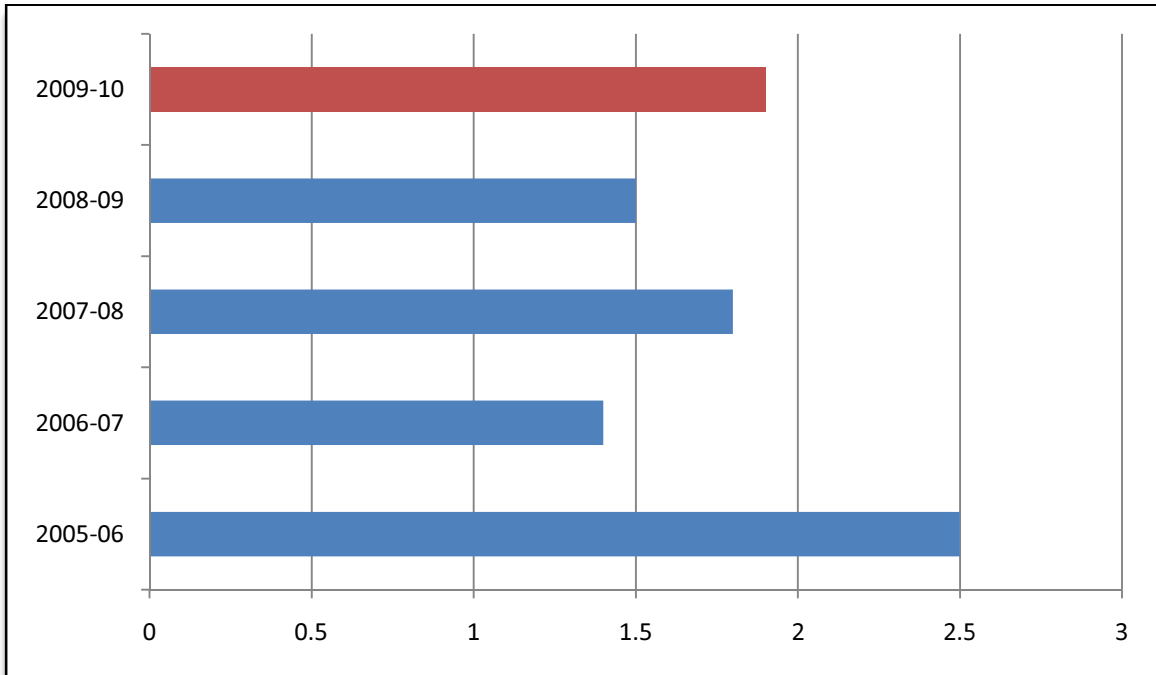


Figure 2: Average number of refereed articles per full-time equivalent research faculty member by AY, 2005-10



INTRODUCTION

The Faculty of Health Sciences (FHS) Research Committee (RC) is pleased to present the eighth annual Research Report for FHS, covering the past five academic years (2005-06 through 2009-10) with emphasis on the AY (2009-10). In this report, the AY refers to the period extending from June 1'09 until May 31 10¹. This report is published by the RC on an annual basis.² The report contains numeric data on FHS research activities, input and output, with a focus on sponsored research and journal publications. The data are used to monitor progress towards achieving the following research objectives:

1. Maintain the amount of sponsored research
2. Maintain the average quantity and quality of research publications
3. Sustain interdisciplinary and collaborative research with AUB Faculties and other universities in Lebanon, the region, and internationally, and
4. Strengthen student participation in Faculty research.

FHS consists of five departments: Environmental Health (ENHL), Epidemiology and Population Health (EPH), Health Behaviour and Education (HBE), Health Management and Policy (HMP), and Medical Laboratory Sciences (MLS). The report includes measurable outcomes on the research objectives for FHS as a whole and by Department. The quantity, type, and quality of research publications are also provided.

The RC Chair would like to acknowledge the contribution of Ms. Ruba Ismail-Hamadeh, instructor, for providing and collecting the relevant data from various sources and Ms. Dalia Makarem and Ms. Roua Dalli, Research Assistants, for their input in the preparation of the report. We thank Dean Iman Nuwayhid and Assistant Dean Rima Afifi for their comments on this and earlier drafts.

¹ The previous research report (2007-2008) covered the period July 1 '07- June 30 '08

² An electronic copy of the previous reports is available on the FHS- RC website:
http://www.aub.edu.lb/fhs/fhs_home/research/Pages/research_reports.aspx

Research Committee, 2009-10

Huda Zurayk (EPH), Chairperson

Sawsan Abdulrahim (HBE) (Replacing Dr. Miran Jaffa during AY 2009-10)

Fadi El Jardali (HMP)

Tamar Kabakian (HBE)

Rima Habib (ENHL) (Replacing Dr. Rabih Kamleh Spring 2009-10)

Nada Melhem (MLS)

By invitation:

Nasser Yassin (Centre for Research and Population Health - FHS)

Maya Terro (Student representative- FHS)

RESEARCH GRANTS

The FHS has been successful in forming multi-investigator, multi-disciplinary research teams that are able to attract substantial extramural funding. During the past AY (2009-10), the Faculty was awarded a total of \$1,013,203 for research as *new* grants (n= 23)³. These grants have a start date between October 2009 and September 2010, and span over a duration between three months and three years. However, for the purpose of this report, the total amount of funding for each grant was divided over the duration of the grant; and what is reported here, is the amount of funds allocated or available for expenditure in a single year. Hence, the amount of funds *available* for research in the AY 2009-10 amounted to a total of \$1,776,338, with the majority being funded by international agencies (92.0%) (table 2). This figure represents the highest amount of funds available in the past 5 years. Appendix A shows an itemized list of faculty research grants in 2009-10.

Table 2: Sponsored grant funding in US dollars available for research by source, 2005-10*

Source	2009-10		2008-09		2007-08		2006-07		2005-06	
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%
International agencies	1,640,696	92.0	1,535,709	94.5	1,322,672	91.6	669,573	81	599,286	94.8
Local agencies	82,528	4.6	74,104	4.6	95,894	6.7	115,194	13.9	11,525	1.8
URB	53,114	3.0	15,720	0.9	25,067	1.7	42,305	5.1	21,600	3.4
Total	1,776,338	100	1,625,533	100	1,433,633	100	872,072	100	632,411	100

RESEARCH OUTPUT

Publications

During the AY 2009-10, the number of publications, including those that appeared in refereed and non-refereed journals, books, book chapters and published research reports, was 70 in total. A full list of articles published in refereed journals in 2009-10 is included as Appendix B. The list does not include publications by the Dean nor

³ Note that funds granted and allocated solely for research are included in this report. Programmatic or scholarship funds do not appear in this report.

by faculty on leave. This figure has fluctuated during the past five AYs between a minimum of 53 in 2006-07 and a maximum of 79 in 2005-06 (Table 3).

The majority of the publications appeared in refereed journals (47; range 39-68 in last 5 years), in the form of original research articles (range 33-62 in the last 5 years) and none as letters, book reviews, or brief reports (range 0-6 in the last 5 years). These were followed by publications in non-refereed journals (13, range 4-13 in the last 5 years). Additionally, publications included seven book chapters (range 2-7) and three research reports (range 3-15).

Table 3: Number of publications by publication type, 2005-09

Publication Type	2009-10	2008-09	2007-08	2006-07	2005-06
Publication in refereed journals	47	41	47	39	68
<i>Articles</i>	47	39	43	33	62
<i>Letters/book reviews/brief reports</i>	0	2	4	6	6
Publications in non-refereed journals	13	5	4	-	-
Books	0	1	0	1	0
Book chapters	7	3	2	2	4
Research reports (published)	3	9	15	11	7
Total	70	59	68	53	79

The research articles that were published in refereed journals (n=47) were re-examined as mean number per full time equivalent (FTE) research active faculty member (Table 4). For the year 2009-10, the mean number of articles published per one FTE was 1.9 (range in the past five AYs 1.4 to 2.5) with the highest output (2.5 per FTE) being achieved in 2005-06. Furthermore, the proportion of research active faculty members publishing at least 2 articles per AY in refereed journals was 52% in 2009-10 (range 52- 56%). For the latter estimate, articles co-authored by more than one FHS faculty member were credited for every author.

Table 4: Articles published in refereed journals according to full-time equivalent (FTE) research active faculty member*, 2005-10

Publications in Journals	2009-10	2008-09	2007-08	2006-07	2005-06
Articles	47	39	43	33	62
Total number of research active faculty members*	25	27	25	24	26
Total FTE	24.5	26	23.5	23.0	25.0
Article/FTE	1.9	1.5	1.8	1.4	2.5
Percent active faculty members publishing at least two articles per year in refereed journals	52.0%	55.6%	52.0%	54.2%	-

* Includes all full-time and part-time faculty of professorial rank, as well as lecturers and instructors involved in research programs and projects.

Table 5 presents the research output at FHS in 2009-10 stratified by department and compared to the output over the last three years (2006-09). The three-year period is chosen to provide relevant information for the FHS accreditation process. A total of 13 articles published in refereed journals were co-authored by faculty members from different departments. For the purpose of this table, duplicate articles published by co-authors from different departments within FHS were counted in all corresponding departments; hence the totals in table 5 do not necessarily match with those in tables 3 or 4. Compared to the average computed for the prior three years, all departments showed an increase in the number of publications in refereed journals in the AY 2009-10, Notably the HMP and HBE departments. The total research output, including duplicates, for all departments for AY 2009-10 (n= 81) was higher than the average of the previous three years (n=63.5). The same trend was observed for the number of articles per FTE as well as research articles appearing in refereed journals except for the EPH department which showed a slight decrease (Table 6). For the AY (2009-10), the highest number of research articles per FTE was achieved in the EPH Department (4.2), and the highest proportion of research active faculty members publishing at least two articles per year in refereed journals was observed in the HMP Department (100 %) (table 6). This was followed by the EPH Department (83.3%) and the ENHL Department (80%).

Table 5: Number of publications in the AY 2009-10 compared to the mean number of publications in the previous three AYs (2006-09) by publication type and department*

Publication Type	ENHL	EPH	HBE	HMP	MLT
Publications in refereed journals					
AY 2009-2010	8	22	15	12	3
Mean of 3 years (2006-2009)	7.3	21.7	10.3	4.3	2.3
Publications in non- refereed journals					
AY 2009-2010	8	0	0	5	0
Mean of 3 years (2006-2009)	0	0.7	0	2.3	0
Books					
AY 2009-2010	0	0	0	0	0
Mean of 3 years (2006-2009)	0.3	0	0	0.3	0
Book Chapters					
AY 2009-2010	3	1	0	3	0
Mean of 3 years (2006-2009)	0.3	1.3	0.7	0	0
Research reports (published)					
AY 2009-2010	0	0	0	3	0
Mean of 3 years (2006-2009)	2	4.7	2.3	2.7	0
Total					
AY 2009-2010	19	23	15	23	3
Mean of 3 years (2006-2009)	9.9	28.4	13.3	9.6	2.3

*Articles published by co-authors from different departments within FHS were counted in all corresponding departments, hence totals do not necessarily add to those presented in table 4.

Table 6: Research articles published in refereed journals in the AY 2009-10 according to full-time equivalent (FTE) research active faculty member* compared to the mean in the previous three AYs (2006-09) by department

Publication Type	ENHL	EPH	HBE	HMP	MLT
Articles					
AY 2009-2010	11	25	24	16	5
Mean of 3 years (2006-2009)	7	20	8	4.3	2.3
Total number of research active faculty members					
AY 2009-2010	5	6	7	4	3
Mean of 3 years (2006-2009)	4.7	7.7	8	2.7	2.3
Total FTE					
AY 2009-2010	5	6	6.5	4	3
Mean of 3 years (2006-2009)	4.7	7.7	7	2.7	2.2
Articles per FTE					
AY 2009-2010	2.2	4.2	3.7	4.0	1.7
Mean of 3 years (2006-2009)	1.5	2.7	1.2	1.6	1.1
Percent active faculty members publishing at least two articles per year in refereed journals†	80%	83.3%	57.1%	100%	66.7%
Mean of last two years (2007-2008, 2008-2009)†	70%	61.6%	31.3%	66.7%	66.5%

* Includes all full-time and part-time faculty of professional rank, as well as lecturers and instructors involved in research programs and projects.

† For articles co-authored by more than one single FHS faculty member, the article is credited for each single author.

Conference Presentations and MSc Theses

The number of conference presentations including oral presentations, papers, and posters presented at conferences in AY 2009-10 was 41 (Table 7). The number of graduate MS theses finalized in 2009-10 increased to 10 from 3 in 2008-09. The data on conference presentations were re-analyzed by department and findings were compared with those reported in the previous three years (Table 8). One department, EPHD, showed a small decrease in conference presentations, while HBED and HMPD have shown an overall increase in conference presentations in the AY 2009-10 as compared to their respective means of the prior three AYs.

Table 7: Summary of conference presentations and MSc theses, 2005-10

Type	2009-10	2008-09	2007-08	2006-07	2005-06
Conference presentations	41	55	33	35	50
MS theses	10	3	8	5	8
Total	51	58	41	40	58

Table 8: Conference presentations and MS theses in the AY 2009-10 compared to the mean in the past three years (2006-09) by department

Type	ENHL	EPH	HBE	HMP	MLT
Conference presentations					
AY 2009-2010	8	10	16	7	0
Mean of 3 years (2006-2009)	9	14	12	5	1
MS theses					
AY 2009-2010	4	6	N/A*	N/A*	N/A*
Mean of 3 years (2005-2008)	1.3	3.6	0	0	0

*HBE, HMP, and MLT departments do not offer an MS degree

INTERDISCIPLINARY AND COLLABORATIVE RESEARCH

Table 9 describes the range of interdisciplinary and collaborative research produced by FHS faculty members in refereed journals as evidenced by co-authorship between faculty members at FHS departments and colleagues from other Faculties at AUB or at outside institutions for the academic years 2005-10. Of the total number of refereed journal publications (n=47), the proportion of publications co-authored within one department at FHS increased from 12.2 % in 2008-09 to 42.55 % in 2009-10. Co-authorship across the five departments also increased from 22 % to 30 %, between 2008-2009 and 2009-2010. Co-authorship with colleagues from outside institutions has decreased from 85.4% to 68.1%. Publications co-authored with current or recent graduate students decreased from 43.6% in 2006-07 to 34.0% in the last year. The proportion of refereed publications led by FHS faculty as first authors or as principal authors⁴ has been maintained at over 50% and over 60%, respectively, for the past three or four years (Table 9).

⁴ A principal author is defined as first, corresponding or sole author.

RESEARCH QUALITY

Table 10 shows the distribution of journal publications by FHS ranking of the journals, which is based on the Journal Impact Factor as defined by the Institute for Scientific Information (ISI).⁵ The majority of papers (59.5%) were published in high quality journals (A⁺ and A journals ranking in the top 60%); 8.5 % were published in the type-B journals (rank in the lower 61-85%), and 8.5% was published in type-C journals (rank in the lowest 86-100%). The number of publications in non-ranked journals (those not listed or ranked by the ISI system) increased from 17% in 2008-09 to reach 23.4 % in 2009-10.

Table 9: Percent distribution of refereed journal publications by co-authorship within and outside FHS

Co-authorship	2009-10	2008-09	2007-08	2006-07	2005-06
Co-authorship within one department at FHS	42.6	12.2	29.8	30.8	41.2
Co-authorship across departments within FHS	30.0	22.0	6.4	25.6	16.2
Co-authorship outside FHS	68.1	85.4	87.2	66.7	73.5
Co-authorship with other Faculties at AUB	25.5	29.3	53.2	35.9	50.0
Co-authorship with national researchers	27.7	34.1	25.5	15.4	14.7
Co-authorship with regional researchers	14.9	9.8	2.8	5.1	7.4
Co-authorship with international researchers	31.9	36.6	38.3	30.8	25.6
Co-authorship with students	34.0	31.7	27.7	43.6	-
First author from FHS	59.6	51.2	53.2	56.4	51.5
Principal author from FHS	72.3	68.3	63.8	66.7	-
Total number of publications	47	41	47	39	68

* Principal author includes first, corresponding and sole author.

† Students include current students or recent graduates.

Table 10: Percent distribution of journal publications in refereed journals by FHS ranking of journal, 2007-10

FHS Ranking Journal	ISI rank (percentile)	2009-10	2008-09	2007-08
A ⁺	1-10%	10.6	24.4	10.6
A	11-60%	48.9	36.6	48.6
B	61-85%	8.5	22.0	8.5
C	86-100%	8.5	0.0	6.4
Not ranked		23.4	17.0	25.6

*Ranking refers to the ISI rank of the journal out of the total number of journals listed in the subject category. Hence, A⁺ as an example, refers to journals in the top 10% percentile of all journals in the same subject category of the specific publication.

⁵ For the corresponding Impact Factor of each journal, as defined by the Institute for Scientific Information (ISI), you can follow the link <http://smlweb.aub.edu.lb/Databases/Default.aspx?CatID=6>

APPENDIX A: Sponsored Research Grants 2009-2010

	Project Name	Topical Area (research grants)	Investigator	Collaborators	Funding Source	Funding Start and End Date	Amount Total Award	Amount Available for Spending- AY 2009-10
	International & Regional Sponsored Research Grants							
1	Evaluation & Production of the Fourth and Fifth Issues of Salamet Hamlik	Childbirth	Kabakian		UNFPA	1-Jul-10 31-Dec-10	\$11,770	\$5,885
2	Informing Tobacco Control Policy in Lebanon: Evaluation of the impact of pictorial warning on cigarette packs initiation of smoking and quitting intentions	Tobacco Control	Nakkash		Action on Smoking & Health International (ASH INTL)	1-May-10 30-Apr-11	\$11,165	\$5,582.50
3	Evidence to Policy & Practice-Enhancing the Capacity of Researchers & Decision Makers in the MENA region		El-Jardali		IDRC	10-Aug-10 10-Dec-10	\$44,994	\$22,497
4	Strengthening Research Capacity in Operations Research in Reproductive Health in the EMRO region-Beirut-Lebanon		Kassak		WHO - Geneva	10-Jul-10 31-Dec-10	\$39,446	\$19,723
5	Cultural and Psychosocial Influences on Disability (CUPID)		Habib		University of Southampton - Colt Foundation	1-Jun-10 31-May-12	\$15,280	\$7,640
6	Lebanon LRBMS-Litani River Basin Management & Support Program	Water Quality	Jurdi	Korfali	International Resource Group	1-Jul-10 31-Oct-10	\$51,315	\$51,315
7	Tobacco control regional workshop	Tobacco Control	Afifi		Syrian Center for Tobacco Studies	1-Jun-10 30-Sep-10	\$35,000	\$35,000

	Project Name	Topical Area (research grants)	Investigator	Collaborators	Funding Source	Funding Start and End Date	Amount Total Award	Amount Available for Spending- AY 2009-10
8	Promoting Youth Reproductive & Sexual Health, & Sexuality Education in the Region	Youth/ Sexuality	Ghandour	El Kak, Kobeissi	Ford Foundation	1-Jun-10 31-May-12	\$200,000	\$0
9	Peer Education Training & Research International Unit-Beirut	Peer Education / Youth	Ghandour		UNFPA	1-Jan-10 31-Mar-10	\$33,139	\$33,139
10	Support for Tobacco Control Research , Dissemination and Networking in Lebanon	Tobacco Control	Nakkash		IDRC	1-Jan-10 31-Dec-12	\$198,258	\$99,129
11	The Sexual and Reproductive Health of Young Married Women in Yemen	Reproductive Health	DeJong		WHO-Geneva	1-Dec-09 31-Dec-10	\$68,112	\$34,056
12	Towards Evidence Informed Policies in the Middle East & North Africa Region	Health Policy	El-Jardali		IDRC	1-Sep-09 1-Sep-12	\$197,720	\$98,860
13	Peer Education Training & Research International Unit-Beirut	Peer Education / Youth	Ghandour / Afifi		UNFPA	1-Jul-09 31-Dec-09	\$140,000	\$46,667
14	Exploring the problem of scarcity of nurses in underserved areas in the Middle East: Factors, Reasons & incentives for recruitment & retention	Human Resources: Nursing	El-Jardali	Susan Murray	Alliance for Health Systems and Policy Research	1-Jun-09 31-Oct-11	\$199,000	\$90,000
15	Risky Behaviors and Protective factors among the Youth in Lebanon"	Youth , Risk Behaviors	Yassin	Afifi, Ghandour	Swiss Academy for Development	15-May-09 14-May-11	\$30,473	\$15,237
16	Safe Work in Lebanese Bakeries: From Policy to Practice	Occupational health	Habib		AMIDEAST	20-Apr-09 31-Oct-10	\$50,000	\$25,000
17	Smoke free policies in Lebanon: lessons learned from existing experiences and recommendations for the future	Tobacco Policy	Nakkash	Afifi, Chaaya	IDRC	1-Mar-09 28-Feb-10	\$37,044	\$18,522

	Project Name	Topical Area (research grants)	Investigator	Collaborators	Funding Source	Funding Start and End Date	Amount Total Award	Amount Available for Spending- AY 2009-10
18	AUB Neighborhood Initiative - Ras Beirut well Survey	Social Inequality	Kaddour	Yassin	Sub award from main Ford Foundation to AUB	1-Jan-09 28-Feb-11	\$60,000	\$30,000
19	Validation of the concept and measurement of youth developmental assets in Lebanon	Youth Health	Afifi	Nakkash	UNDP	5-Dec-08 31-Jan-10	\$14,905	\$0
20	A national study to estimate prevalence, burden of illness and help seeking behavior of Rheumatic diseases in Lebanon	Chronic Diseases- Rheumatology	Chaaya	Thurayya Arayssi, Imad Uthman, Rima Habib	International League of Associations of rheumatology	1-Jan-09 31-Dec-09	\$10,000	\$2,000
21	A national study to estimate prevalence, burden of illness and help seeking behavior of Rheumatic diseases in Lebanon	Chronic Diseases- Rheumatology	Chaaya	Thurayya Arayssi, Imad Uthman, Rima Habib	Shering Plough	1-Jan-09 30-Apr-10	\$54,960	\$30,640
22	Displaced Arab families coping and changes: Iraqi refugees in Lebanon	Displacement/ Refugees health	Makhoul		Arab Families working Group	1-Nov-08 15-Apr-10	\$17,000	\$5,667
23	Support for the reproductive health working group: Institutional Learning for the next phase	Reproductive Health	Jocelyn DeJong		Ford Foundation	1-Jun-08 31-May-11	\$450,000	\$175,000
24	Comparison of Estimates based on Cell Phone and Face to Face Interviews	Behavioral Risk Survey	Abla Sibai	Monique Chaaya, Ziyad Mahfoud	The Training Programs in Epidemiology and Public Health Interventions Network	12-Mar-08 30-Sep-10	\$180,130	\$40,000

	Project Name	Topical Area (research grants)	Investigator	Collaborators	Funding Source	Funding Start and End Date	Amount Total Award	Amount Available for Spending- AY 2009-10
					(TEPHINET)			
25	The publication and dissemination of two books on public health and on Childbirth in the Arab region	Public Health	Iman Nuwayhid	Marwan Khawaja, Samer Jabbour	Ford Foundation	1-Feb-08 31-Jul-11	\$195,000	\$0
26	Neurotoxic Effects of solvents on working children	Child Labour	Iman Nuwayhid		NIH	15-Sep-07 31-Aug-11	\$288,528 (\$148,270 for Year 1)	\$0
27	Does reducing depression and/or anxiety symptoms of low-income married women (residing in Hey El- Selloum) using a community-based psycho-social intervention decrease their complaints of medically unexplained vaginal discharge?"	Reproductive Health	Zurayk	Ziyad Mahfoud, Sami Ramia, Faysal El-Kak, Kobeissi, Nakkash	Wellcome Trust	1-Aug-07 31-Aug-11	\$410,406	\$136,802
28	Impact of a community based RCT to improve mental health of Palestinian refugee youth	Youth Health	Rima Afifi/ Huda Zurayk	Judy Makhoul, Ziyad Mahfoud, Sawsan Abdulrahim, Mayada Kanj, Nakkash	Wellcome Trust	1-Jul-07 31-Dec-10	\$371,291	\$123,764
29	Bedouin Health- Improving Access to and Quality of Reproductive and Child Health Care to Marginal Peoples: Bedouin in Jordan and Lebanon	Reproductive Health	Huda Zurayk	Faysal El-Kak	Oxford U/ Warwick University/ EC	1-Jun-07 20-Dec-10	\$333,291	\$111,097
30	Labor Supply, Child Bearing & Women's Welfare in Old Age	Elderly Health	Abla Sibai		Center of Arab Women for Training and Research	1-Feb-07 30-Sep-10	\$25,289	\$0
31	Determinants and Consequences of Smoking Nargileh: Extending the Research Agenda	Tobacco Control	Monique Chaaya	Rima Afifi, Abla Sibai, Ziyad	IDRC	13-Nov-06 30-Nov-10	\$187,230	\$0

	Project Name	Topical Area (research grants)	Investigator	Collaborators	Funding Source	Funding Start and End Date	Amount Total Award	Amount Available for Spending- AY 2009-10
				Mahfoud, Robin Health, Mayada Kanj, Rima Nakkash				
32	Health status, well-being and population change in the Middle East: a research network approach	Childbirth / Urban Health	Huda Zurayk	Jocelyn DeJong, Tamar Kabakian, Hibah Osman	Wellcome Trust	1-Jan-05 30-Sep-11	\$3,085,075	\$377,475
	Local Sponsored Research							
33	IMPROVE: Nationwide Implementation of Lebanese Hospital Performance Scorecard System (LHQPSS)	Health Policy	El Jardali		WHO	13-Sep-10 31-Dec-10	\$6,050	\$3,025
34	Family relations, migration and Aging: The Case of Lebanon		Abdulrahim		LNCSR	31-Dec-09 31-Dec-10	\$6,631	\$6,631
35	National Case Studies on Health Policy Making in the Middle East	Health Policy	El Jardali		Issam Fares Institute- AUB	22-Dec-09 22-Dec-11	\$18,000	\$9,000
36	Potential role of HLA & KIR as Correlates of Protection among Hepatitis B virus vaccinated & non-vaccinated subjects	Infectious diseases	Melhem		LNCSR	1-Dec-09 30-Nov-11	\$15,915	\$7,958
37	Contesting relative deprivation : the Ras- Beirut well being survey	Social Inequality	Zurayk	Kaddour	LNCSR	1-Dec-09 30-Nov-10	\$7,294	\$7,294
38	Complementary & Alternative Medicine Therapies in Lebanon: A Baseline Study	Drug Utilization	Mohammad Alameddine	Dr. Farah Naja - FAFS	LNCSR	1-Apr-09 30-Sep-11	\$17,241	\$8,621
39	Lebanese Hospital Quality performance Scorecard system: next steps for national scorecard initiative	Health Quality	El-Jardali	Saleh	WHO	9-Apr-09 30-Nov-09	\$9,900	\$0
40	Establishment of Water Quality Assessment & Management Unit at the Environmental Health	Water Quality	May Jurdi, Sami Ramia	May Massoud, Samira Korfali	LNCSR	1-Jan-09 31-Jan-12	\$120,000	\$40,000

	Project Name	Topical Area (research grants)	Investigator	Collaborators	Funding Source	Funding Start and End Date	Amount Total Award	Amount Available for Spending- AY 2009-10
	Department			(LAU)				
41	Effect of substitution of Sodium Chloride with Potassium Chloride in brines and microbiological and physio chemical characteristics of Akkawi and Halloumi cheeses	Food Industry	Rabih Kamleh		LNCSR	1-Nov-08 30-Apr-10	\$6,963	\$0
42	Strengthening National Monitoring , Evaluation, & surveillance systems in Lebanon, Middle East and North Africa Region	HIV / AIDS	Kassem Kassak, Jocelyn DeJong	Rima Afifi, Sami Ramia, Ziyad Mahfoud, Sawsan Abdulrahim, Fatea Rimalwi	National AIDS Program – Ministry of Public Health/ WHO	10-Nov-06 Till funds end	\$98,210	\$0
43	Prevalence of Hepatitis C Virus (HCV) Infection among Lebanese Injecting Drug Users	HIV / AIDS	Kassem Kassak		Hoffmann La Roche	3-Jul-07 Till funds end	\$7,470	\$0
	URB Grants							
44	Hazard Analysis of the Raw Sheep Meat Consumption in Lebanon	Food Quality	Rabih Kamleh		URB	1-Oct-09 30-Sep-10	\$6,910	\$6,910
45	The Recruitment and Retention of Health Human Resources in Primary Health Care Centers in Lebanon: A National Study	Human Resources: Nursing	Mohammad Alameddine		URB	1-Oct-09 30-Sep-10	\$8,136	\$8,136
46	Informing Tobacco Control Policy in Lebanon: Evaluation of the Impact of Pictorial Warning on Cigarette Packs on Initiation of Smoking and Quitting Intentions- A Pilot Study in Greater Beirut	Tobacco Control Policy	Rima Afifi		URB	1-Oct-09 30-Sep-10	\$9,000	\$9,000
47	Feasibility Study for Smoking Cessation Intervention in Pregnant Women Attending Primary Care Clinics	Tobacco & RH	Ziyad Mahfoud		URB	1-Oct-09 30-Sep-10	\$8,658	\$8,658

	Project Name	Topical Area (research grants)	Investigator	Collaborators	Funding Source	Funding Start and End Date	Amount Total Award	Amount Available for Spending- AY 2009-10
48	Prescription Drug Use among College Students in Lebanon: Prevalence, Patterns, and Correlates of Medical and Non-Medical Use and Diversion	Drug Utilization	Lilian Ghandour		URB	1-Oct-09 30-Sep-10	\$7,000	\$7,000
49	The Use of Strategic Planning in Lebanese Hospitals and Its Association with Financial Performance	Quality Performance in Hospitals	Shadi Saleh		URB	1-Oct-09 30-Sep-10	\$6,410	\$6,410
50	Potential Role of HLA and KIR as Correlates of Protection among HBV Vaccinated and Non-Vaccinated Health Care Workers	Infectious Diseases	Nada Melhem		URB	1-Oct-09 30-Sep-10	\$7,000	\$7,000
	Institutional Development Support Grants							
51	Multidimensional scholarship program for graduate education in public health		Dean		Arab Fund	1-Feb-09 30-Jun-13	\$350,877	
52	Support to Strengthen Teaching, Research and Community Capacities & promote the Regional Role of FHS with a focus on HIV/AIDS		Iman Nuwayhid	Jocelyn DeJong	Ford Foundation	1-Oct-06 30-Sep-11	\$275,000	

Total amount available for spending
Grant No. 8 will start the expenditures in October 2010.

\$1,776,338

Grants No. 19, 25, 26, 30, 31, 39,41,42,43 have no funding for 2009-10 (Have been extended, budget accounted in previous reports)

Appendix B: List of articles in refereed journals^{6 7}

ENHL Department

R.Kamleh, J Fanni and E. El Mayda. (2010). The characteristics of cow's milkfat produced in four different dairy regions in Bekaa Valley Lebanon. *Journal of Food, Agriculture and Environment*, Vol 8 (accepted April 2010)

R.Kamleh, J Fanni and E. El Mayda. (2010). Composition and rheological properties of butters produced in Bekaa valley-Lebanon. *Journal of Food, Agriculture and Environment*, Vol 8 (accepted April 2010)

M. Massoud, R. Fayad, R.Kamleh and M. El Fadel. (2010). Environmental Management System (ISO 14001) Certification in Developing Countries: Challenges and Implementation Strategies. *Environmental Science and Technology*, 44 (6), 1884-1887.

M. Massoud, R. Fayad, M. El Fadel and R.Kamleh. (2010). Drivers, barriers and incentives to implementing environmental management systems in the food industry: A case of Lebanon. *Journal of Cleaner Production*, 18 (3), 200-209.

M. Jurdi and S. Korfali (In Press). "Deterioration of Ground Water Aquifers: Causes and Impacts". *Journal of EWRA "European Water"* (AR- RJ)

Massoud, M.A., Al-Abady, A., Jurdi, M. and Nuwayhid, I. "The challenges of Sustainable Access to Safe Drinking Water in Rural Areas of Developing Countries: Case of Zawtar El-Charkieh, Southern Lebanon". *Journal of Environmental Health* (AR- RJ)

Habib RR, Hamdan M, Al-Sahab B, Tamim H, Afifi RA. The influence of parent-child relations on safety belt use among school children in Beirut. *Health Promotion International*, In Press.

Habib RR, Fathallah FA, Messing K. Full-time homemakers: Workers who cannot "go home and relax". *International Journal of Occupational Safety and Ergonomics*, 16(1): 113-128, 2010.

⁶ The list does not include publications by the Dean or by faculty on leave.

⁷ When authors include more than one department, the article is included in the department of the corresponding author

EPH Department

Martins, S., Ghandour, L., Lee, GP., Storr, C. Socio-demographic and substance use correlates of gambling behavior in the Canadian general population. *Journal of Addictive Diseases* (In press).

Karam, E., Ghandour, L., Maalouf, W., Salamoun, M., & Yamout, K. A Rapid Situation Assessment of substance use and misuse in Lebanon: A step towards a national drug demand reduction plan. *Lebanese Medical Journal* (In press).

Saliba M., Zurayk H. 2010. Expanding concern for women's health in developing countries: The case of the Eastern Mediterranean Region. *Women's Health Issues*. 20 (3): 171-177 (May-Jun 2010)

Mahfoud Z, Kassak K. Kreidieh K, Shamra S, Ramia S. (2010) Distribution of Hepatitis C Virus Genotypes among Injecting Drug Users in Lebanon *Virology Journal* (7:96doi:10.1186/1743-422X-7-96)

Karnib H., Gharavi A., Aftimos G., Mahfoud Z., Saad R., Gemayel, E., Masri B., Badr K., Ziyadeh F. (2010). A 5-year survey of biopsy proven kidney diseases in Lebanon: significant variation in prevalence of primary glomerular diseases by age, population structure and consanguinity. *Nephrology Dialysis Transplantation*.(in press)

Mahfoud Z., Afifi R., Ramia S., El Khour D., Kassak K., Barbir F., Ghanem M., El Nakib M. and DeJong J (corresponding author). (2010). HIV/AIDS among Female Sex Workers, Injecting Drug Users and Men who have Sex with Men in Lebanon: Results of the first Bio-Behavioral Surveys (AIDS)

Mahfoud Z., Kassak K., Kreidieh K., Shamra S. Ramia S (2010). Prevalence of antibodies to human immunodeficiency virus (HIV), hepatitis B and hepatitis C and risk factors in prisoners in Lebanon. *Journal of Infection in Developing Countries*. 4(3):144-149

Mahfoud Z., Afifi R., Haddad P., DeJong J. (2010). Prevalence and Determinants of Suicide Ideation among Lebanese Adolescents: Results of the GSHS Lebanon 2005. *Journal of Adolescence* (in press)

Mahfoud Z, Saad S, Haddad P, Chaaya M (2010). Determinants of Change in Paternal Smoking Trends during Pregnancy Among Fathers. *Acta Obstetrica et Gynecologica Scandinavica*; 89(4):587-591

Arabi A, Mahfoud Z, Zahed L, El-Onsi L, El-Hajj Fuleihan G (2010). Effect of Age, Gender, and Calcitropic Hormones on the Relationship between Vitamin D Receptor Polymorphisms and Bone Mineral Density. *European Journal of Clinical Nutrition*; 64: 383-391

Barada K, El-Atrache M, El-Hajj I, Rida K, El-Hajjar J, Mahfoud Z, Usta J. (2010). Homozygous mutations in the conserved ATP hinge region (GDGVNDSPAL) of the Wilson disease gene: association with liver disease. (*Journal of Clinical Gastroenterology*) (In Press)

Hedlin H, Caffo B, Mahfoud Z, and Spear Basset S (2010). Covariate-adjusted Nonparametric Analysis of Magnetic Resonance Images Using Markov Chain Monte Carlo. *Statistics and Its Interface*. 3:113-123

Arabi A, Zahed L, Mahfoud Z, El-Onsi L, Nabulsi M, Maalouf G, El-Hajj Fuliehan G (2009). Vitamin D Receptor Gene Polymorphisms Modulate the Skeletal Response to Vitamin D Supplementation in Healthy Girls. *Bone* 2009; 45(6): 1091-1097

Fares, J.E., Kanaan, M, Chaaya, M., Azar, S.T. Fluctuations in glycosylated hemoglobin (HbA1C) as a predictor for the development of diabetic nephropathy in type 1 diabetic patients. *International Journal of Diabetes Mellitus*, Volume 2, Issue 1, April 2010, Pages 10-14

Yamout , R, and Chaaya, M. Individual and collective determinants of mental health during wartime. A survey of displaced populations amidst July-August 2006 war in Lebanon. *Global Public Health* (accepted)

Ashkar, K., Roumani, M., Mousharrafieh, U. & Chaaya, M. (corresponding author) (2010) Prevalence of Burnout Syndrome among Medical Residents: Experience of a developing country. *Postgraduate Medical Journal*, 86:266-271 doi:10.1136/pgmj.2009.092106

Farhood, L., Chaaya M. (corresponding author) & Saab, B.R. (2010) Detainment and Health: The case of the Lebanese hostages of war. Accepted in *International Journal of Mental Health Nursing*, 19, 83–91

Haddad, P., Mahfoud, Z., Afifi, R., DeJong, J., Radi, A. Suicide Ideation among Adolescents in Lebanon, *Journal of Adolescence* <http://dx.doi.org/10.1016/j.adolescence.2010.03.009> (available online, print in press)

Abboud, S., Noureddine, S., Abu Saad Huijjer, H., DeJong, J., Mokhbat, J. Quality of Life of HIV/AIDS Patients in Lebanon. *AIDS Care* (in press)

HBED Department

Kabakian-Khasholian T., El Kak F., Shayboub R. Birthing in the Arab region: translating research into practice. *Eastern Mediterranean Health Journal*. Accepted

Makhoul J, Nakkash RT, El Hajj T, Abdulrahim S, Kanj M, Mahfoud Z, & Afifi RA (corresponding author). Development and validation of the Arab Youth Mental Health Scale. *Community Mental Health Journal* - in press

Fadi El-Jardali; Makhoul, J; Diana Jamal; Michael Kent Ranson; Nabil M Kronfol; Victoria Tchaghchagian (2009) Eliciting policymakers' and stakeholders' opinions to help shape health system research priorities in the Middle East and North Africa region *Health Policy and Planning*; doi: 10.1093/heapol/czp059

Nakkash R, Makhoul, J (corresponding) , Afifi, R. Obtaining informed consent: observations from community research with refugee and impoverished youth. *Journal of Medical Ethics*, Volume: 35, Issue:10. 2009

Afifi R, Nakkash R, Khawaja, M. Social Capital, Women's autonomy, and smoking among married women in low-income urban neighborhoods of Beirut, Lebanon. *Women Health Issues*. In press

Nakkash R, Khalil J, Chaaya M, Afifi RA (corresponding author). Building research evidence for policy advocacy: A qualitative evaluation of existing smoke free policies in Lebanon. *Asia Pacific Journal of Public Health*. In press.

Nakkash R, Khalil J. Health warning Labeling practices on tobacco products, *Tobacco Control*. In press.

Afifi RA, Yeretzian JS, Rouhana A, Nehlawi MT, Mack A. (2009). Neighborhood effects on narghile smoking among youth in Beirut. *European Journal of Public Health*. doi: 10.1093/eurpub/ckp173.

Abdulrahim, S. & Ajrouch, K. (May 2010). * Social and cultural meanings of self-rated health: Arab immigrants in the United States. Accepted to: *Journal of Qualitative Health Research*.

Ramahi, T., Khawaja, M., Abu-Rmeileh, N., & Abdulrahim, S. (in press). Socioeconomic Disparities in Heart Disease in Lebanon: Findings from a Population-based Study. Accepted to: *Heart Asia*.

Tewtel-Salem, M., Abdulrahim, S., Zurayk, H. (2009). Using open-ended data to enrich survey results on the meanings of self-rated health: a study among women in underprivileged communities in Beirut, Lebanon. *Women & Health*, 49(8): 1-17.

HMP Department

Saleh SS, Callan M, Landor N, Theriault M (2010). Costs Associated with the Occurrence of Hospital-Acquired Complications for Discharges with a Critical Care Stay. *Medical Care* (in press)

Shawky S, Soliman C, Kassak KM, Oraby D, El-Khoury D, Kabore I. HIV surveillance and epidemic profile in the Middle East and North Africa. *J Acquir Immune Defic Syndr*. 2009 Jul 1;51 Suppl 3:S83-95.

Husari AW, Belzberg H, Kassak K, Dunham CM. Relationship between intensive care complications and costs and initial 24 h events of trauma patients with severe haemorrhage. *Emerg Med J*. 2009 May;26(5):340-3.

Saleh, S., Alameddine, M. Hill, D., Darney-Beuhler, J. & Morgan, A. (2009). The Return on Investment (ROI) of a Rural Employer-Based Wellness Program. *Journal of Rural Health* (In press).

El-Jardali F., Jaafar M., Dimassi H., Jamal D., Hamdan R. The Current state of Patient Safety Culture in Lebanese Hospitals: A study at Baseline. *International Journal for Quality in Health Care*. Forthcoming

El-Jardali F., Alameddine M., Dumit N., Dimassi H., Jamal D., and Maalouf S. Nurses' Work Environment and Intent to Leave in Lebanese Hospitals: Implications for Policy and Practice. *International Journal of Nursing Studies*. Forthcoming

El-Jardali, F., Makhoul J., Jamal, D., Ranson M.K., Kronfol, N., and Tchaghchagian, V. Policy-Relevant Health Systems Research Priorities in Nine Low and Middle Income Countries in the Middle East and North Africa Region, *Health Policy and Planning*, Vol. 25 (1), 2010, pp. 1-13

El-Jardali, F., Tchaghchagian, V., and Jamal, D. Assessment of Human Resources Management Practices, Challenges and Strategies in Lebanese Hospitals: The Perspective of Human Resources Managers, *Human Resources for Health*, 2009, 7:84

Saleh S, Alameddine, M and El-Jardali, F. The Case for Developing Publicly-Accessible Datasets for Health Services Research in the Middle East and North Africa (MENA) Region, *BMC Health Services Research*, 9:197 (29 Oct 2009)