



American University of Beirut
Faculty of Agricultural
and Food Sciences

Annual Report 2012–13



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Faculty of Agricultural
and Food Sciences

Annual 2012–13 Report



Preface

Dear Alumni and Friends,

It is a pleasure to share with you the 2012—13 Faculty of Agricultural Food Sciences (FAFS) Annual Report. The report is a snapshot of the Faculty's accomplishments over the past year and highlights the major initiatives and developments that have taken place, illustrating FAFS's commitment to higher levels of excellence in teaching, research and outreach.

During this academic year, FAFS has been fully engaged in building on its strategic priorities of previous years in providing excellence in education that extends to the community, the region and the world while maintaining the commitment to human health and well-being.

The Faculty also moved forward on academic initiatives , where the Nutrition and Food Science department (NFSC) has successfully completed its AUB external academic review requirements for all academic programs. In parallel, the US Council for Education in Nutrition and Dietetics (ACEND) reviewed the Coordinated Program in Nutrition and Dietetics, met extensively with faculty, staff and students to recommend accreditation for the NFSC program. In addition, the Landscape Design and Ecosystem Management department (LDEM) has successfully completed the revision of its program and is now offering a Bachelors in Landscape Architecture. The LDEM department has initiated the accreditation process by the American Society of Landscape Architects (ASLA) through a self-study and is in the process of preparing a new Masters program in Landscape Architecture(MLA). The Agriculture Sciences department (AGSC) has initiated the AUB external academic review of all the agriculture programs offered. The Environment and Sustainable Development Unit (ESDU) at FAFS also launched a new MS program in Rural Community Development (RCODE).

The Faculty also moved forward on its initiative to address Food Security, where Expert consultant, Dr. Eckart Woertz, worked to establish a program for degree and non-degree programs for Capacity Building in Food Security to be submitted to the Faculty for approval. In addition, a joint Doctor of Veterinary Medicine (DVM) program between FAFS and the Faculty of Medicine was initiated.

This year FAFS has also recruited two new faculty members one Assistant Professor in Veterinary Sciences in the Animal and Veterinary Sciences department(AVSC) and the other Visiting Assistant Professor in Community Nutrition in the department of Nutrition and Food Sciences department (NFSC).

During this academic year, faculty members secured financial support of \$532,099 from internal, as well as national, regional and international public and private institutions such as the Ministry of Agriculture, CNRS-Lebanon, ICARDA, and

IDRC. The faculty successfully published a total of 32 publications as refereed articles in international journals in addition to 47 abstracts and proceedings, books and book chapters, articles in other journals, dissertation manuscripts, technical reports and posters. In addition, the faculty organized many conferences and seminars tackling issues of regional and global importance under the themes of food security, food safety and human wellbeing in collaboration and partnership with national and international organizations such as the Lebanese Academy for Nutrition and Dietetics (LAND), the Sustainable Management Group and Canadian Standards Association, the United States Agency for International Development (USAID), ACDI/VOCA, Farmer-to-Farmer program, Lebanese Ministry of Health, the Lebanese National Council for Scientific Research, and the FAFS Alumni Chapter.

In line with FAFS's initiative to strengthen and expand research partnerships both within and outside the Faculty, an MOU was signed with the International Center for Agricultural Research in the Dry Areas (ICARDA) in support of future cooperation in agricultural research and capacity development. ICARDA and FAFS will also jointly establish a gene bank at AREC for the conservation of extinct crop varieties. In addition, UNIFERT renewed their agreement with FAFS to run a demonstration trial for the selection of new varieties of hybrid vegetables at AREC.

FAFS's efforts to improve the current faculty's infrastructure and facilities were supported by a generous donation from the late alumnus, Nour Dajani, for the renovation and refurbishment of the FAFS Faculty Lounge in the name of the late alumnus.

The details of the numerous achievements mentioned are outlined in the following report. I would like to express my thanks to all of your contribution and support throughout this academic year.

Nahla Hwalla

Dean FAFS

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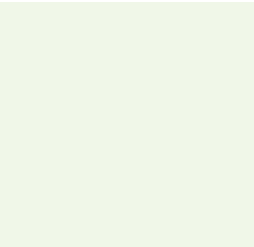
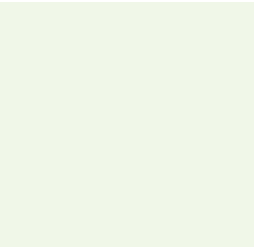
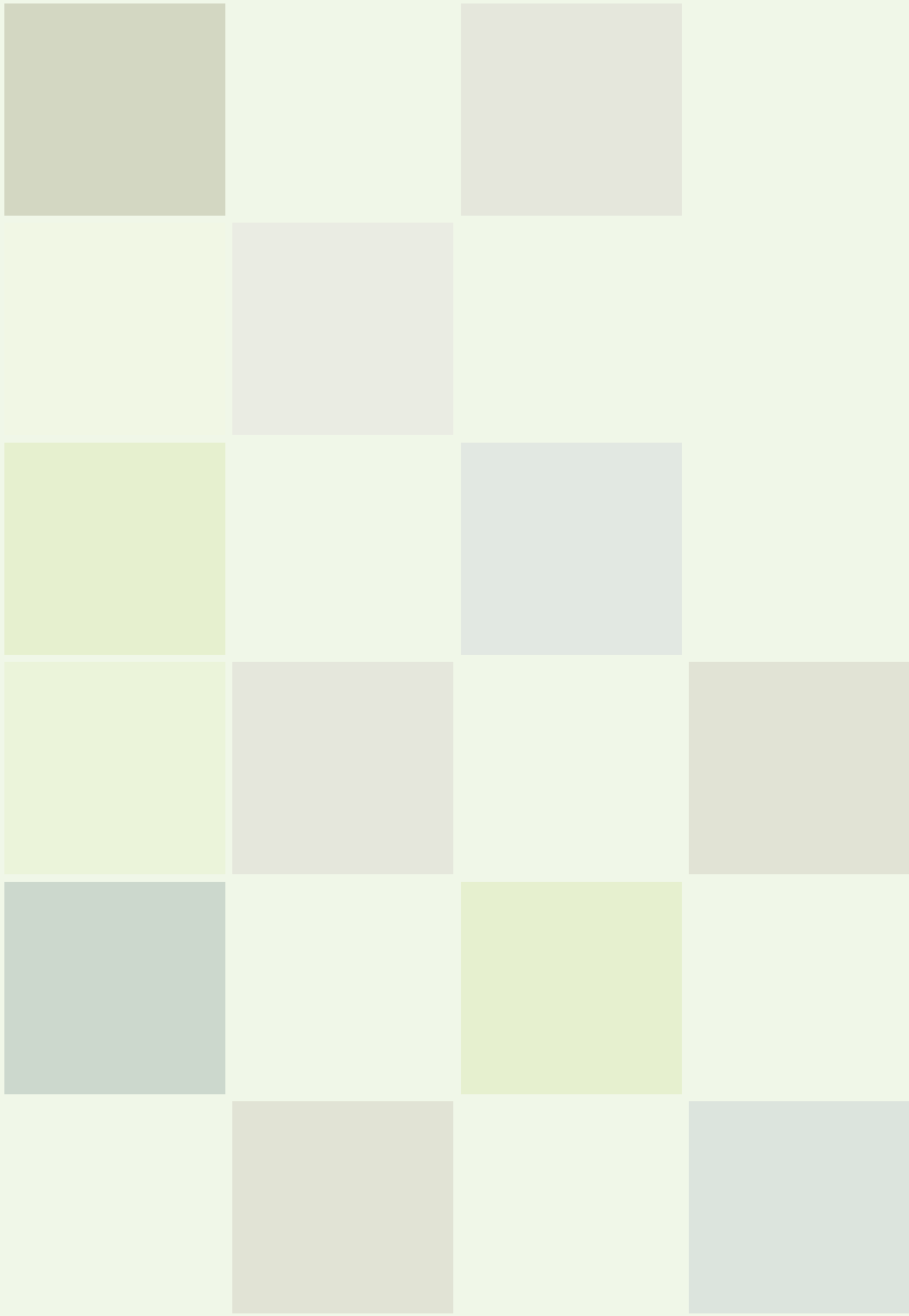
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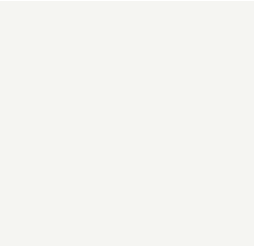
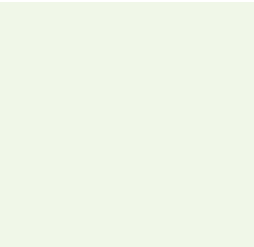
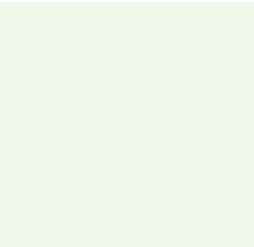
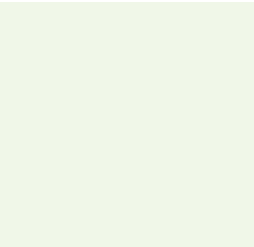
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I. Office of the Dean



A. Non-Academic Personnel

Nine non-academic employees serve at the Dean's office as per table 1 below:

Table 1: Non-Academic Personnel

Name	Title
Al Ashi, Dania	System Administrator
Assaf, Ghina	Administrative Assistant (resigned June 1, 2013)
Haddad, Tharwat	Students Record Officer
Haidar, Imad	Junior Clerk
Houri, Laila	Financial Officer
Khoury, Wafa	Executive Officer
Koubayssi, Rabia	Assistant for Student Services
Nakib, Nisreen	Secretary
Zeidan, Maya	Program Review and Accreditation Officer

B. Standing Committees

The Administrative Committee

Prepared by Maya Nabhani Zeidan, Program Review and Accreditation Officer

Membership

Nahla Hwalla, Chairperson
Hilal Dbouk
Shady Hamadeh
Zeina Kassaify
Salma Talhouk

Actions

The committee held thirteen meetings throughout the academic year 2012–13 and the following actions were taken:

1. *Merger of the AVSC and AGSC Departments*

The committee members approved the merger of the AGSC and AVSC departments.

2. *Departmental Research Assistants*

The committee agreed that departmental Chairs shall develop Terms of Reference (TOR) for research assistants at the different departments in order to facilitate identification of tasks that they are overseeing as well as their yearly evaluation.

3. *Space*

Space requirements for the Environmental and Sustainable Development Unit (ESDU) were discussed by the committee and it was agreed that the area behind the Greenhouse will be developed, in coordination with the LDEM and AGSC departments, into a cohesive eco-unit for the Faculty and ESDU personnel that showcases best practices.

4. *On-line Student Petitions*

The newly developed on-line petitions system at the Faculty was discussed and committee members were briefed by the FAFS IT manager on its implementation including the hierarchy and flow of the process.

5. *Capital Budget*

The committee members approved priority requests submitted by FAFS departments and AREC for the capital budget 2013–14.

6. *Graduate Assistants*

The committee members approved the appointment of 68 graduate assistants in the various FAFS departments for the fall, spring, and summer terms.

7. *FAFS Advisory Board*

Committee members welcomed the addition of Mr. Debbane to the Faculty's Advisory Board.

8. *AREC*

- Revised tuition at AREC was implemented during the AY 2012–13.
- A situation analysis at AREC was completed by Mr. Dbouk and presented to the committee.
- ICARDA has rented from AREC a large area for setting up a seed gene bank and facilities for its employees.

The Advisory Committee

Prepared by Maya Nabhani Zeidan, Program Review and Accreditation Officer

Membership

Nahla Hwalla, Chairperson
Youssef Abou Jawdeh
Mohammad Farran
Shady Hamadeh
Salma Talhouk
Imad Toufeili
Rami Zurayk

Actions

The committee held seventeen meetings throughout the academic year 2012–13 and the following actions were taken:

1. Faculty Research Leave

Applications for (15) short term faculty development grants, (1) long term faculty development leave, (1) junior faculty research leave, (1) periodic paid research leave and (44) special leaves with pay were approved.

2. New Appointments

- The committee recommended the recruitment of seven full-time faculty members for the AY 2012–13 and the fall semester 2013–14:

(1) Assistant Professor in Sports and Clinical Nutrition in the NFSC Department, (3) full-time Instructors at the NFSC Department, (1) full-time visiting lecturer in Agronomy at the AGSC Department, and (3) Visiting Assistant Professors: (1) at the Animal and Veterinary Sciences (AVSC) Department and (2) at the NFSC department. Of these, eleven offers have been accepted, one has been declined and three are still pending.

- Departmental recommendations for part-time faculty members' recruitment were considered and the committee approved the following appointments for the AY 2012–13 and fall semester 2013–14: (13) in the NFSC department; (23) in the LDEM Department, (26) in the AGSC Department and (2)j at the AVSC Department.
- Two preceptor associates were appointed, on a non-remunerative basis at the NFSC department.
- One faculty associate and one adjunct associate professor were appointed at the LDEM department.

- The committee approved the appointment of Professor Shady Hamadeh as chairperson of the AGSC department for two years starting January 2013.

3. Renewal of Contracts

The committee approved the re-appointment of (5) full-time faculty members in the positions of (1) professor at the AGSC department, and (4) instructors: (1) at the LDEM department and (3) at the NFSC department.

4. URB Visiting Scholars

The committee approved a departmental recommendation to invite Dr. Harvey Anderson as URB Visiting Scholar in the NFSC department.

Academic and Curriculum Studies Committee

Prepared by: Ms. Rabia Koubayssi, Assistant for Student Services

Membership

Nahla Hwalla, Chairperson
Ali Chalak
Mohamad Farran, Undergraduate Coordinator
Shady Hamadeh
Zeina Kassaify
Farah Naja
Lara Nasreddine, Undergraduate ND/Coordinator
Salma Talhouk
Registrar's Representative
Student Representative
Rabia Koubayssi, Secretary

Actions

The Committee met 9 times during the academic year 2012–13 and the following actions were taken:

1. Approved Second BS in Agriculture for Agribusiness students

The Committee approved and the revised courses for Second BS degree in Agriculture for Agribusiness students effective spring 2013:

NFSC 221, AGSC 221, AVSC 243, AVSC 271, AGSC 220, AGSC 222, AVSC 222/226, AGSC 228, AGSC 231, AGSC 224, AGSC 284, AGSC 232, AGSC 295, AGSC 235, (3cr.) of any AGSC elective and (3cr.) of any AVSC elective.

2. *Approved course offerings*

The Committee approved and modified spring, summer and fall course offerings.

3. *Eligible students to go to AREC*

Fourteen students from the Agriculture program and 19 students from the Landscape program were deemed eligible to go to AREC during the spring semester of 2012–13. Classes at AREC were approved to start on February 18, 2013.

4. *Merging and Renaming AGSC and AVSC Departments*

The Committee approved and recommended to the Faculty to merge both AGSC and AVSC departments to become “Department of Agriculture”.

5. *Approved changing grading of NFSC 280 (Summer Internship), (1 cr.)*

The Committee approved changing the grading system of NFSC 280 (Summer Internship), (1 cr.) from Pass/Fail to a numerical grade effective summer 2012–13.

6. *Revised AGSC Program*

The Committee discussed the modified AGSC program which was presented by Dr. Haidar and a suggestion was made by the Committee to change the title of the degree from BS in Agriculture to BS in Agriculture Engineering.

7. *Awarding BS degrees*

The Committee recommended to the Faculty to award BS degrees to 110 students distributed as follows: 24 in Nutrition and Dietetics, 14 in Nutrition and Dietetics – Coordinated Program, 21 in Food Science and Management, 24 in Landscape Design and Eco-Management and Diploma of Ingenieur Agricole, 10 in Agriculture and Diploma of Ingenieur Agricole, 17 in Agribusiness and 3 in Veterinary Science.

8. *Probation*

Based on AUB probation rules and regulations, the Committee acted to drop six students during academic year 2012–13. Twelve students were placed on probation. Four students were removed from probation.

The Admissions Committee

Prepared by: Tharwat Haddad, Student Records Officer

Membership

Nahla Hwalla, Chairperson

Mohamad Abiad

Ali Chalak

Nadim Farajalla

Mohammad Farran

Admission's Representative

Registrar's Representative

Student Representative

Tharwat Haddad, Secretary

Actions

The Committee held five meetings during the academic year 2012–13 and the following actions were taken:

1. *Acceptance of Transfer Students*

- Spring semester 2012–13: 35 transfer students of which 23 registered.
- Fall semester 2013–14: 119 transfer students of which 38 registered.

2. *Approve the performance at AUB for Transfer of Non-Degree Students*

The committee approved to evaluate non-degree transfer students in light of their performance at their previous university/institution in addition to their performance at AUB.

3. *Petitions*

The Committee received and considered one petition from a previous FAS undeclared major student to apply as a transfer student to AGRI and FSMT majors.

4. *New Applicants to Other Faculties*

The Admissions Committee agreed that students who are not accepted in other faculties will be granted acceptances by FAFS, according to the following criteria:

- Applicants who were not accepted in ECON or BADM will be granted acceptance in AGBU (Agribusiness major), and FSMT (Food Science and Management major) provided they satisfied the minimum required composite score and spaces in corresponding majors are available.

- Applicants who were not accepted in CHEM, BIOL or Engineering will be granted acceptance in AGRI (Agriculture major) provided they satisfied the minimum required composite score and space in corresponding major is available.
- Applicants who were not accepted in CHEM or BIOL will be granted acceptance in NTDT (Nutrition and Dietetics major) provided they satisfied the minimum required composite score and spaces in corresponding major is available.
- Applicants who were not accepted in ARCH will be granted acceptance in LDEM (Landscape Design and Ecosystem Management major) provided they satisfied the minimum required composite score and space availability.

The Graduate Studies Committee

Prepared by: Ms. Rabia Koubayssi, Assistant for Student Services

Membership

Nahla Hwalla ,Chairperson
 Youssef Abou Jawdeh
 Hala Ghattas
 Zeina Kassaify
 Imad Toufeili
 Maria Gabriella Trovato
 Admission's Representative
 Registrar's Representative
 Student Representative
 Rabia Koubayssi,Secretary

Actions

The Committee met four times during the academic year 2012—13 and the following actions were taken:

1. Program of study and thesis titles

The Committee reviewed and approved the program of study and thesis titles of 32 students distributed as follows: 7 from NUTR, fourteen from FTCH, three from ECOM, one from ANML, one from IRRG, two from POSC, three from PLPT and one from PLSC.

2. Acceptance of graduate students

The Committee accepted 78 students out of 121 applicants with Nutrition attracting the largest number of applicants. Of the accepted candidates,

21 students were enrolled as follows: 6 Nutrition, 5 Food Technology, two Ecosystem Management, two Plant Protection, two Plant Science , one Irrigation, one Poultry Science, one Agricultural Economics, and one Animal Science.

3. Petitions

The Committee received and considered a total of twenty three petitions from students, the majority of which were to transfer graduate courses which they took above their undergraduate requirements, changing status from prospective graduate to regular graduate, extending residency, extending incomplete grades, changing thesis title, and transferring from one major to another.

4. Requirements of M.S degree in Plant Sciences

The Committee approved the recommendation of the AGSC department to modify the requirements of the MSc in Plant Sciences to include 3 more courses in Soil Science.

5. New Graduate Course at FAFS – Research Techniques or Methods

The Committee approved that the NFSC department offer the course Research Techniques as an elective for all students at FAFS, which will be taught by different professors and coordinated by Dr. Youssef Mouneimne.

6. New Elective Graduate Course in LDEM

The Committee approved the new elective graduate course Urban Greening (LDEM 300) to be offered by the LDEM department.

7. Awarding the MS degree

The Committee recommended that the Faculty award the MS degree to 32 students in their respective majors: 12in Nutrition, 11 in Food Technology, three in Plant Protection, two in Ecosystem Management, one in Irrigation, one in Animal Science, one in Poultry Science and one in Plant Science.

The Research Committee

Prepared by: Dr. Rami Zurayk, Professor

Membership

Rami Zurayk, Chairperson
 Isam Bashour
 Elie Barbour
 Farah Naja

Actions

During the academic year 2012—13, the Faculty Research Committee (FRC) held several meetings. The following actions were taken:

1. URB Research Proposals for 2012—13

1.1 Review Process:

The committee reviewed and evaluated the URB proposal process and decided on the following:

- Increasing the weight assigned to the rank of the applicant from 10 to 20 percent (20: Assistant, 15: Associate, 10: professor).
- Allocating 15 percent of the total score to the research productivity of the applicant from URB grants during the past five years (2007-12).
- Assigning 65 percent weight to the proposal evaluation: 2/3 of this weight was based on the evaluation of the reviewers, and 1/3 was assigned to the committee evaluation of the proposal.
 - Faculty members reflected on the relevance of the reviewers' evaluation and decided to weight the evaluations by the familiarity and involvement of the reviewers in the research area of the proposal. Evaluation of reviewers who are actively engaged in research in this specific area was assigned a weight of 100 percent. Evaluation of reviewers who have carried out research in the applicant's specific area in the past was assigned a weight of 75 percent. Evaluation of reviewers whose experience is in the general area, but have not worked in the applicant specific area was assigned the weight of 50 percent.
 - In case the applicant does not have a record of URB grants (either he/she is new to AUB or did not receive any URB grants during the last 5 years), weight was distributed as follows: 25 percent to the rank of the applicant (25: assistant; 20: Associate; 15: professor) and 75 percent for proposal evaluation (25 percent for the research committee and 50 percent for the reviewers evaluation).

1.2 Evaluation of URB proposals by FRC

The following criteria were to be assessed by the faculty research committee during the evaluation of URB proposals:

- Risks and safety issues of the proposed project
- Availability of appropriate facilities and equipments to conduct the proposed project
- The conformity of the proposed research objective with FAFS research priorities.
- Proof of productivity (publications) stemming from previous URB funded projects.

1.3 Score sheet

The committee reviewed the score sheet for evaluation of research proposals and included appropriate measures to adequately evaluate the methodology of qualitative research. FRC suggested using a new scoring sheet that is largely similar to that used by FAS (for harmonization purposes).

1.4 Selection of reviewers

Each of proposal applications has to have at least three suggested reviewers (two by the applicant and one by the research committee member in charge of the proposal). None of the suggested reviewers should belong to the same department of the applicant and at least one of the suggested reviewers by the applicant should be from outside AUB. For evaluation purposes, minimum two scholars should review the proposal, with one being the reviewer suggested by the research committee.

1.5 Approval of URB Proposals

Fourteen new proposals were submitted for URB funding, thirteen among them were reviewed and evaluated (Table 2), and the fourteenth proposal was withdrawn from the cycle since the same proposal received funding from the faculty of Medicine. Nine proposals were approved with a total funding of \$75,582 for the academic year 2013-2014.

Principal Investigator	Proposal Titles
Farah Naja	Complementary and alternative medicine use, dietary practices and food security among people living with HIV and AIDS (PLWHA) in Lebanon
Lara Nasreddine	Correlates of overweight and obesity among Lebanese preschool children
Mohamad Abiad	The effect of solventpolarity and different activation methods on the surface area of cyclodextrin metal organic frameworks
Maria Trovatto	Landscape Atlas
Ammar Olabi	The effect of salt reduction on dough and Arabic bread characteristics
Zeina Kassaify	Inhibitory effects of encapsulated curcumin in Liposomes on Salmonella spp, E. coli, Listeria Monocytogenes and Staphylococcus aureus
Hadi Jaafar	Operational policies for multi.objective reservoirs: the case study of Qarawn
Imad Toufeili	Contribution of the phenolic fraction to the antioxidant activity of floral and honeydew honeys
Yusuf Abou Jawdeh	Exploring the potential of local strains of microalgae for biological control of plant pests
Mustapha Haidar	Response of tomato cultivars and orobanche ramosa to rimsulfuron
Issam Bashour	Antibiotics uptake by plants from manured-amended soils
Nadim Farajallah	Development of Planting Soil Mixes Derived from MSW Compost and Construction Demolition and Excavation Waste for the Rehabilitation of Quarries
Shadi Hamadeh	Sustainability assessment and adapting dashboard technology for small scale dairy sector: a case study in Mount Lebanon

Table 2 : Research proposal submitted to URB funding during AY 2013-14

2. Approval of External Research Proposal

The committee reviewed and approved seven research proposals submitted by FAFS to the Lebanese National Council for Scientific Research (LNCSR).

3. Approval of Research Leave Request

The committee reviewed and approved the below submitted requests:

- Junior Paid Research Leave for Dr. Chalak for Fall 2013—14
- Periodic Paid Research Leave for Dr. Olabi for Spring 2013—14

Recommendation

- Increasing the weight of research productivity from 15 to 20 percent of the total URB proposal evaluation in the coming years. Such an increase in weight for research productivity ought to be communicated to all applicants before submission.
- Using the score sheet for evaluation of research proposals that is currently used by FAS.
- Adapting a new scoring system that would be fair to senior and Junior Faculty alike.

The Student Affairs Committee

Prepared by: Dr. Zeina Kassaify, Associate Professor and Ms. Tharwat Haddad, Student Records Officer

Membership

Ali Chalak
 Elie Barbour
 Nadim Farajalla
 Lara Nasreddine
 Student Affairs Representative
 Student Representative
 Tharwat Haddad, Secretary

The Committee met three times between the period of October 1, 2012 - September 30, 2013, and discussed disciplinary actions and FAFS awards. The following recommendations were made to the Dean:

1. Disciplinary Actions

The FAFS Student Affairs Committee referred the case of one undergraduate student to the Dean for action.

The FAFS Student Affairs Committee recommended giving a Dean's Warning to three undergraduate students.

2. FAFS Awards

The Committee recommended the following students to receive FAFS awards:

- Joanna Haidar Award: Ms. Michelle Mouawad
- Edgcombe Award: Ms. Samia Hamati

- Kashadurian Award: Ms. Farah Abi Mosleh
- Abdul Hadi Debs Award: Ms. Patricia Tabarani, Nutrition, and Ms. Grace Abou Jawdeh, Landscape Design and Ecosystem Management
- Dean Thomas Thuserland Prize for Graduate Excellence: Ms. Nour Hamami, Nutrition
- Dean Nuhad Dagher Graduate Student Award: Ms. Diana Ahmadiéh, Animal Science
- Penrose Award: Ms. Nisrine Kawa

An email was sent to all FAFS faculty members to nominate candidates for this award and only three candidates from Nutrition major were nominated. After reviewing the records and the presentation of the nominees, candidates' performances were graded by the Committee (from 1 to 5) then the total scores were calculated. The Committee recommended to the FAFS Faculty to grant the Penrose Award to Ms. Nisrine Kawa.

The Committee members modified the selection process for the Penrose Award as follows:

- Each department will pre-select eligible nominees and send a memo to SAC with the names and CVs of their nominees
- Next the Committee would require a presentation from each candidate to the SAC
- Finally, the Committee will evaluate nominees based on the following four criteria according to an established rubric:
 - Scholarship
 - Character
 - Leadership
 - Contribution to University Life

3. AREC Day

AREC Day was held on Sunday, April 21, 2013. The event included a wide range of games, multi-cuisine and refreshment selection. About 1000 students and guests attended the event this year.

C. University Committees

Academic Development Committee

Prepared by: Dr. Zeina Kassaify, Associate Professor

Actions

The ADC approved FAFS's proposal for a revised B.Sc. (BA) in Landscape Design and Eco-Management (LDEM) program.

Dr. Salma Talhouk gave a presentation about the program, how it began and the rationale behind revising the program. In addition, she informed the Committee that accreditation requirements are included in the revisions as they are seeking accreditation for the program by the American Society for Landscape Architecture. The program was finally approved after the recommendations provided by the Committee were included.

University Admissions Committee

Prepared by: Dr. Mohamad G. Abiad, Assistant Professor

Actions

1. *Approved new categories for non-degree transfer students to AUB/FAFS as described here after:*

- Students, who have completed 12 credits at another university, admitted to AUB as non-degree students and completed 12 credits at AUB (Total of 24 credits, 12 credits from another university and 12 credits from AUB).
- Students, who have completed 12 credits at another university, admitted to AUB as non-degree and completed 24 credits at AUB (Total of 36 credits, 12 credits from another university and 24 credits from AUB).
- The above student categories (1 and 2) have to apply through regular admission process to be admitted to AUB, SAT and high school grades will be evaluated by the Sophomore Admission Committee. Such applicants don't need to take the SAT exams to apply as non-degree students but if they decide to transfer to AUB their SAT scores will be considered during evaluation.
- Students, who have completed 24 credits at another university, admitted to AUB as non-degree and completed 12 or 24 credits at AUB (Total of 36 or 48 credits, 24 credits from another university and 12 or 24 credits from AUB). These students have to meet the faculty transfer requirements to be admitted

to AUB. Their files will be evaluated by the concerned faculty to which they are applying.

2. Established new criteria for accepting students to FAFS in order to improve enrollment. The new criteria are summarized as follows:

- Applicants who were not accepted to Economics (ECON) or Business Administration (BADM) will be granted acceptance to Agribusiness (AGBU) and FSMT provided they satisfied the minimum required composite score and availability of space in the corresponding majors.
- Applicants who were not accepted to Chemistry (CHEM), Biology (BIOL) or Engineering (ENG) will be granted acceptance to AGRI provided they satisfied the minimum required composite score and availability of space in the corresponding majors.
- Applicants who were not accepted to CHEM or BIOL will be granted acceptance to NTDT provided they satisfied the minimum required composite score and availability of space in the corresponding majors.
- Applicants who were not accepted in ARCH will be granted acceptance to LDEM provided they satisfied the minimum required composite score and availability of space in the corresponding majors.

Board of Graduate Studies

Prepared by: Dr. Zeina Kassaify, Associate Professor

Actions

The Board approved FAFS's proposal for MS in Rural Community Development (RCODE).

This proposal was evaluated by a task force formed by BGS. and a task force was formed to evaluate this proposal on February 22, 2012. The recommendations were sent to FAFS for consideration and a revised proposal was then submitted to BGS.

University Publications Committee

Prepared by: Dr. Imad Toufeili, Professor

FAFS submitted two book proposals for publication by the AUB University Press. The book titles are:

Trees of Lebanon by Salma Talhouk and the Nature Conservation Center.

Food Composition Tables for Composite Dishes from Rural Lebanon by Malek Batal, Hala Ghattas, and Aida El Aily. (Submitted for peer review)

University Research Board

Prepared by: Dr. Rami Zurayk, Professor

Actions

During the academic year 2012—13, the URB committee met several times to:

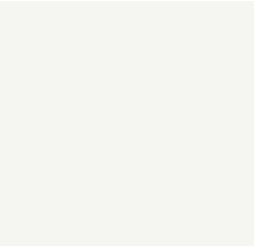
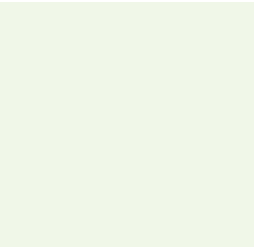
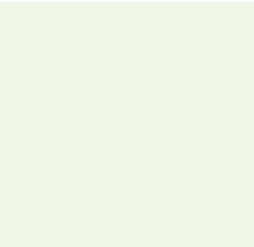
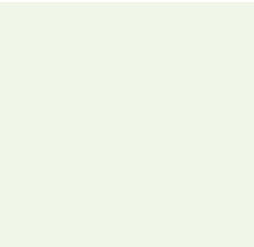
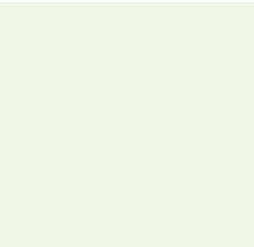
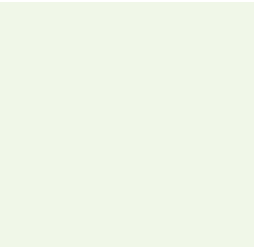
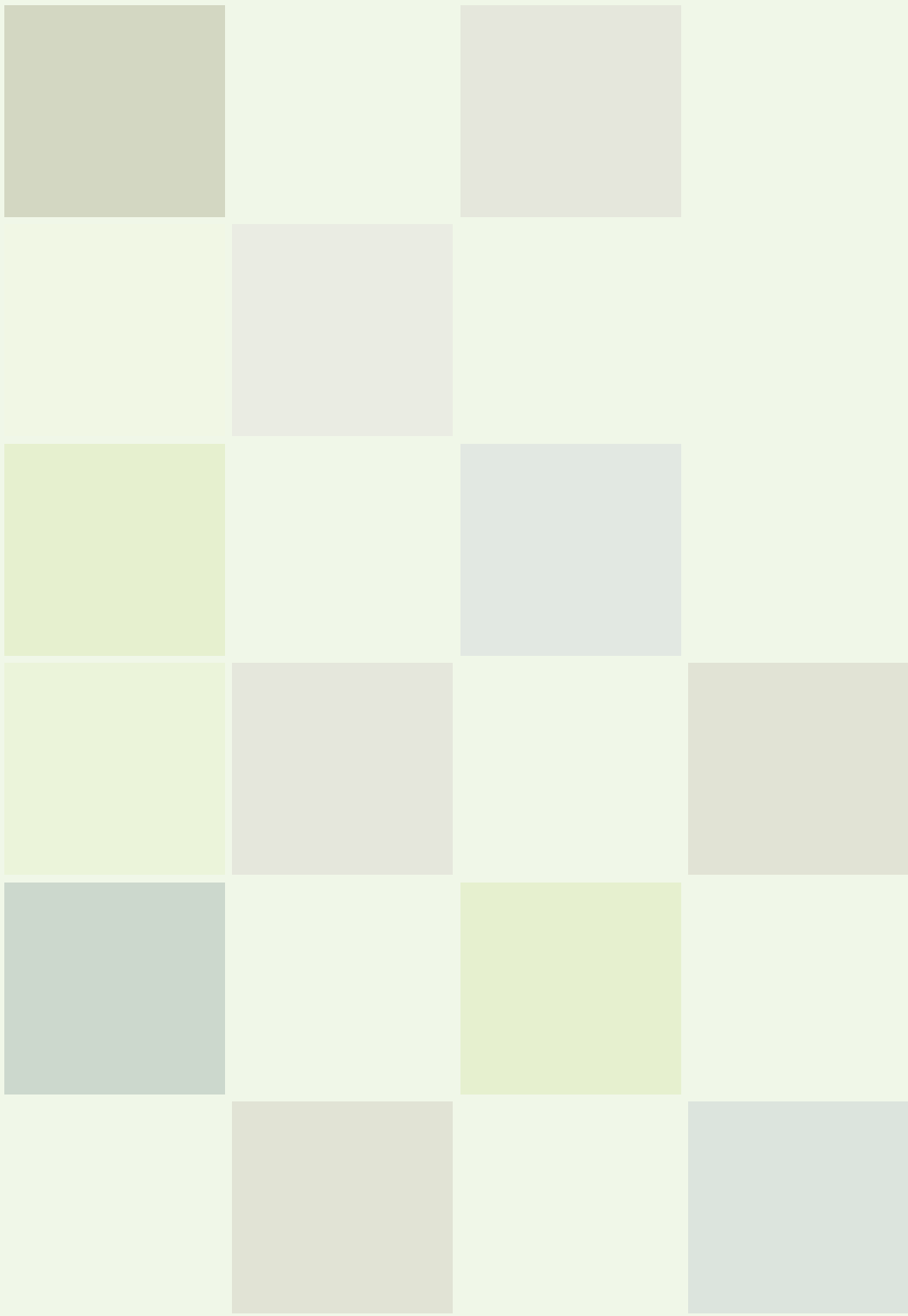
Agree on the final version of “University policy and procedures concerning research misconduct,” document.

Discuss the submitted URB applications for AY 2013—14. Of the 13 research proposals submitted by FAFS to URB for funding, only 9 were approved and the total amount of funded projects was \$75,582.

D. Fund Raising and Endowment Funds

The inauguration of Dr. Nour Kamel Dajani Faculty Lounge was held on December 14, 2012. Dr. Dajani was an alumna and former instructor at FAFS and this lounge was refurbished and renovated with a generous donation from her family.

Unifert, a Lebanese agricultural Company donated \$8,000 to FAFS Dean's Hardship Fund.



II. The Faculty

A. Academic Matters

Faculty Recruitment and Count

The total number of Faculty Full Time Equivalent (FTEs) for Fall 2012–13 was 38.31 distributed as follows:

- 24 FTE (Full-timers) in professorial ranks (eight Assistant, one Visiting Assistant, three Associates, one Visiting Professor, 11 Professors)
- one, one
- 7 FTE (Full-timers) in non-professorial ranks were (five Instructors and two Lecturers)
- 7.31FTE (Part-timers) (1.25 Senior Lecturers and 3.97 Lecturers; and 1.82 Instructors and 0.10 Assistant Instructors)

The distribution of FTE's by department is shown in Table 3

Table 3: FTE by Department

		Department				
		AGSC	AVSC	LDEM	NFSC	Total
Full-time	Professorial Rank	8	3	5	8	24
	Lecturer and Instructor			3	4	7
Part-Time		3.52		2.18	1.61	7.31
Total		11.52	3	10.18	13.61	38.31

In addition, a total of ten full time Research Associates, Senior Research Assistants, and Research Assistants were hired on University funds.

Academic Appointments

The following Faculty served as Chairs of FAFS departments:

- Shady Hamadeh; Animal and Veterinary Sciences and Agricultural Sciences departments
- Mustafa Haidar; Agricultural Sciences department (until February 13, 2013)
- Zeina Kassaify; Nutrition and Food Sciences department
- Salma Talhouk; Landscape Design and Ecosystem Management department

Five professorial lines were advertised in 2012–13 of which two were filled one with

a visiting professor in Nutrition and Food Science and the second position of assistant professor in Veterinary Sciences. The other three positions in Sports and Clinical Nutrition, Landscape Design and Ecosystem Management, and Agribusiness are still pending.

The BOT approved Emiritus status appointments for Drs. Nasri Kavar and Raja Tannous in the agricultural sciences and nutrition and food sciences departments respectively.

FAFS Advisory Board: Mr. Raphael Debbane, Chairman of Desco Holding SAL. – Debbane Saikali Group Beirut – Lebanon, was appointed as new member to the FAFS Advisory Board.

Promotion

Two faculty members were promoted to Associate Professors in the departments of Agricultural Sciences and in NFSC, effective September 1, 2013.

Faculty Affairs

Drs. Shady Hamadeh and Zeina Kassaify were appointed as Chairpersons of the AVSC and NFSC departments, respectively, for a period of three years as of October 1, 2012.

Dr. Shady Hamadeh was also appointed as Chair of the AGSC department in addition to his current position as Chair of the AVSC department, effective February 15, 2013. Dr. Hamadeh will set the road map to complete the merger of the departments of AVSC and AGSC and streamline activities that will stimulate growth and raise visibility of research, teaching, and outreach in agriculture at FAFS.

The faculty completed the first phase of the faculty member information system (FMIS) in support of the faculty's ability to track their academic progress.

New Global Theme Programs

In line with its 2012–17 strategy, FAFS has moved forward on the introduction of graduate MS degrees. BOT approved the proposal for the new MS in Rural Community and Development (RCODE) program on November 16, 2012. After securing MOE registration, the program hosted an onsite evaluation by Dr. David Brown of Cornell University and submitted an application for NYSED registration.

FAFS moved forward on its initiative to address Food Security by hosting Expert consultant Dr. Eckart Woertz who developed degree and non-degree programs for

Capacity Building in Food Security and a program proposal will be submitted to the various University committees for approval.

Research Grants and Service Contracts

FAFS was successful in attracting research and service funding from internal, local and international agencies for a total \$ 532,099. During this fiscal year , \$79,960 of the total amount were from URB (9 faculty members), \$36,800 from internal funding (3 faculty members), \$152,445 were from local funding (6 faculty members) and the remaining \$ 262,894 from international and regional funding agencies (7 faculty members).

Accreditation and Program Review

Nutrition and Food Science (NFSC) department is currently awaiting decision on accreditation in the process of the Nutrition and Dietetics Coordinated Program (NDCP) after the on site evaluation completed by the US Accreditation Council for Education in Nutrition and Dietetics (ACEND).

The department is addressing ACEND's recommendations while awaiting final approval on accreditation.

The NFSC department has also completed a self-study of its five academic programs and the external reviewers, Drs. Connie Weaver, Distinguished Professor and Department Head at the Department of Nutrition Science, Purdue University and Daryl Lund, Professor Emeritus at the Department of Food Science, University of Wisconsin, visited the NFSC department for an on-site assessment. The reviewers submitted an exit report to the Provost on their findings which the department has began addressing.

The LDEM department secured MOE registration for its revised undergraduate program under the new title Bachelor of Landscape Architecture (BLA) and completed a self-study of the program for submission towards NYSED registration as well as initiating the accreditation process by the American Society of Landscape Architects (ASLA).

The AGSC Department is in the process of a program review of its programs whereby a self-study is being developed for submission in October 2013.

Recognition

The article "Validity of predictive equations developed to estimate body fat from anthropometry and bioelectrical impedance analysis in 8-10 years-old children,"

co-authored by NFSC faculty members, Drs. Lara Nasreddine, Farah Naja, Nahla Hwalla, with Dr. Andrew P. Hills, from Griffith University received the CA and CC Rebeiz award 2011. Drs. Hala Ghattas and Omar Obeid were the recipients of two out of five Innovative Biomedical Research Grants initiated by Vice President Sayegh that was announced during the 3rd Annual AUB Biomedical Research day held on February 16, 2013.

Faculty Professional Activities

The following FAFS faculty members received short term development grants and presented papers and chaired sessions in scientific meetings : Drs. Barbour, Bashour, Haidar, Hamadeh, Kassaify, Nasreddine, Naja, Obeid, Saad , Talhouk , Trovato, Toufeili and Weltzien.

FAFS Brown Bag Seminars

During the first semester, Dr. Mohammad Abiad presented to faculty members a presentation on "Metal organic frame works under potential application in food packaging." Dr. Elie Barbour presented on "Veterinary microbiology research in Agriculture sustainability, Food safety and security" and Dr. Isam Bashour presented a seminar entitled "The impact factor of conducted research on agricultural development." During the spring semester 2013, Dr. Jad Chaaban presented to faculty members a lecture on "Can Economics research influence policy making ? Some Recent Evidence from Lebanon and Beyond."

Seminars

In alignment to the four global themes of FAFS, seminars, workshops, and symposia were organized at the Faculty that addressed food safety, food security and nutrition and non-communicable diseases.

Food Safety: The NFSC Department organized a 4-day seminar series on Food Packaging, in collaboration with the United States Agency for International Development (USAID) and ACIDI/VOCA, Farmer-to-Farmer program. Drs. Bruce Harte and Rafael Auras from the School of Packaging at Michigan State University addressed relevant issues. The NFSC department organized an applied HACCP training workshop in collaboration with Sustainable Management Group and Canadian Standards Association which aimed at training students in creating and applying a HACCP plan to any food facility.

Food based dietary guidelines: FAFS organized a launching event for the manual 'Food-Based Dietary Guidelines' prepared by the NFSC Department and adopted by MOH

and CNRS. The NFSC department and the Lebanese Academy for Nutrition and Dietetics (LAND) organized a conference entitled “Ensuring a Healthy Start for the Pediatric Population,” with support from the Coca Cola Foundation. The conference highlighted the importance of early life nutrition and physical activity during the 1st 1000 days of life for the enhancement of infant/young child health as a prevention strategy against adult-onset Non-Communicable Diseases (NCDs).

Other events hosted by FAFS included the following:

The LDEM department organized LandWorks seminar on the operative workshop for the international festival of ephemeral artistic installations. Guest landscape architects, Dr. Stefan Tischer and Dr. Annacaterina Piras, presented “LandWorks Sardinia 2011 and 2012,” demonstrating site specific experimentation with artistic installations valorizing particularly sensitive places in western Sardinia.

The FAFS Alumni Chapter in coordination with FAFS organized a symposium on career trends and opportunities in Agriculture, Nutrition and Landscape Design addressing FAFS students on employment opportunities available after graduation. An exhibit accompanied the event whereby companies from Agriculture, Landscape, Nutrition and Food Science promoted their products and their activities in the market.

Strategic Partnership

In line with FAFS’s initiative to strengthen and expand research partnerships both within and outside the Faculty, an MOU was signed with the International Center for Agricultural Research in the Dry Areas (ICARDA) in support of future cooperation in agricultural research and capacity development. ICARDA and FAFS will also jointly establish a gene bank at AREC for the conservation of extinct crop varieties.

UNIFERT renewed their agreement with FAFS to run a demonstration trial for the selection of new varieties of hybrid vegetables at AREC for the period April 1, 2013–November 30, 2013.

Faculty Meetings

Prepared by: Dr. H. Jaafar, Assistant Professor

During the period September 15, 2012–June 5, 2013, five faculty meetings were held at FAFS in which the following actions were taken:

1. Memorandum of Understanding (MOU) with Purpan University

The Faculty approved the Memorandum of Understanding on exchange students with Purpan University.

2. Double major Degree and Major Minor

The Faculty approved the Double major Degree and Major Minor policy.

3. Merger of AVSC and AGSC Departments

The Faculty approved the merging of the AVSC and AGSC into one unit under the name of the “department of Agriculture.”

4. Voting of Degrees

Faculty members voted unanimously to award BS degrees in Agriculture and Diploma of Ingénieur Agricole, Agribusiness, Nutrition and Dietetics, Nutrition and Dietetics-Coordinated Program, Food Science and Management, Landscape Design and Eco-Management and Diploma of Ingenieur Agricole, Veterinary Sciences and Master of Sciences for students as recommended by the representatives from each department, effective October 2012, February 2013 and June 2013 consecutively.

5. Awards:

Faculty members voted on the recommendation of the Student Affairs Committee to offer FAFS awards to the following students:

- Abdul Hadi Debs Endowment Award: Ms. Patricia Tabarani and Grace Abou Jawdeh
- Dean Thomas Sutherland Award for graduate excellence: Ms. Nour Hamami
- Edgcombe Memorial Prize: Ms. Samia Hamati
- Kashaduran Award: Ms. Farah Abi Mosleh
- The Joana Haidar Award: Ms. Michelle Mouawad
- Penrose Award: Ms. Nisrine Kawa
- Dean Nuhad Dagher FAFS Graduate Student Award: Ms. Diana Ahmadi

B. Student Statistics

Student Enrollment 2012–13

The total undergraduate student enrollment in the Faculty for the year 2012–13 was 538 distributed as follows: 146 in Nutrition and Dietetics, 118 in Agriculture, 103 in Landscape Management, 14 in Nutrition and Dietetics-Coordinated Program, and 2 in Veterinary Science. The undergraduate enrollment in 2012–13 was approximately the same as in 2011–12.

Total graduate student enrolment was 111. This decreased from 132 in 2011–12 to 111 in 2012–13. This was mainly due to a drop in the number of newly admitted students. The vast majority of the graduate enrolment was in the NFSC department (79) and the remaining were distributed among AGSC (16), LDEM (9) and AVSC (7) departments.

Table 4: Total Student Enrolment in various FAFS programs during the academic year 2012–13

Undergraduate Enrollment	AY 2012–13
Nutrition and Dietetics (NTDT)	146
Nutrition and Dietetics – Coordinated Program (NTDT-CP)*	14
Food Science and Management (FSMT)	73
Agriculture (AGRI)*	118
Agribusiness (AGBU)	82
Landscape Design and Eco-Management Ecosystem (LDEM)*	103
Veterinary Sciences (VTSC)	2
Total Undergraduate	538
Graduate Enrollment	
Nutrition (NUTR)	48
Food Technology (FTCH)	31
Agricultural Economics (AGEC)	3
Irrigation (IRRG)	3
Plant Protection (PLPT)	3
Plant Science (PLSC)	7
Animal Science (ANML)	2
Poultry Science (POSC)	5
Ecosystem Management (ECOM)	9
Total Graduate	111
Total (UG & GR)	649

* Agriculture, Landscape Design and Eco-Management and Nutrition and Dietetics – Coordinated Program are 4 years programs

Historical Perspective 2012–13

Undergraduate enrollment decreased from 640 in 2008–09 to 538 in 2012–13 due to the implementation of higher acceptance criteria for attracting higher quality students and the increase of the number of students transferring out of the faculty at the Junior and Senior levels. The increase in the undergraduate average composite score from 492 in 2008–09 to 517 in 2012–13 might have contributed to the 19% drop in undergraduate enrollment for in 2012–2013. The undergraduate enrollment in the past 5 years is shown in Table 5.

Table 5: Number of Enrolled Undergraduate FAFS Students for the Last Five Academic Years

Program	08–09	09–10	10–11	11–12	12–13
NTDT	191	184	137	122	146
NTDT-CP	n.a.	17	20	18	14
FSMT	129	111	95	81	73
AGRI (4 years)	202	177	139	117	118
AGBU	6	62	55	91	82
LDEM (4 years)	104	98	109	101	103
VTSC	8	9	8	11	2
Total Undergraduate	640	658	563	541	538

Graduate enrollment decreased from 132 students in 2011–12 to 111 in 2012–13, this was mainly due to a drop in the number of newly admitted students. The graduate enrollment in the past 5 years is shown in Table 6.

Table 6: Number of Enrolled Graduate FAFS Students for the Last Five Academic Years

Program	08—09	09—10	10—11	11—12	12—13
NUTR	55	61	53	57	48
FTCH	24	32	33	40	31
AGEC	3	4	6	4	3
IRRG	6	5	3	4	3
PLPT	5	5	3	5	3
PLSC	2	2	2	2	7
SOIL	3	2	2	2	-
ECOM	5	10	9	2	9
ANML	6	3	3	3	2
POSC	2	2	1	13	5
Total Graduate	111	126	115	132	111

Student Admissions 2012—13

Undergraduate New Applicants:

During the academic year 2012—13, a total of 2181 new applications were received at FAFS, of which 43 percent were accepted and 18 percent of the accepted were enrolled. In the fall semester of 2012—13, the yield of admittance was 17 percent (145 enrolled out of 832 accepted students); whereas in the spring semester of 2012—13, the yield of admittance was 21 percent (23 enrolled out of 112 accepted students). The number of enrolled undergraduate students was 168 and 20% higher than that in 2011—12 (135 students). This increase was due to the implementation of a new practice of accepting in FAFS applicants who were denied admission to other Faculties at AUB. Table 7 shows the numbers and percentages of undergraduate new students who applied to the different FAFS majors, those who were admitted and those who enrolled in fall and spring 2012—13.

Table 7: Number of New Undergraduate Applicants, Admitted and Enrolled during the Academic Year 2012—13

First Semester 2012—13				
Program	Applications	Admissions	Enrollment	% Yield
NTDT	398	196	36	18%
FSMT	310	84	14	17%
AGRI	440	212	40	19%
AGBU	401	179	29	16%
LDEM	311	128	26	20%
VTSC	80	33	0	0%
Total	1940	832	145	17%
Second Semester 2012—13				
Program	Applications	Admissions	Enrollment	% Yield
NTDT	54	22	9	41%
FSMT	41	15	2	13%
AGRI	86	54	9	17%
AGBU	42	18	2	11%
LDEM	18	3	1	33%
Total	241	112	23	21%

Undergraduate Transfer Applicants:

During the academic year 2012—13, a total of 324 transfer applications were received at FAFS of which 142 (44%) were accepted and 61 (43%) of those accepted were enrolled. Table 8 shows the numbers and percentages of undergraduate transfer students who applied to the different FAFS majors, those who were admitted and those who enrolled in fall and Spring 2012—2013.

Table 8 : Number of Undergraduates (Second Degree and Transfer) Applicants, Admitted and Enrolled during the Academic Year 2012—13

First Semester 2012—13				
Program	Applications	Admissions	Enrollment	% Yield
NTDT	62	30	13	43%
FSMT	30	18	6	33%
AGRI	30	25	11	44%
AGBU	47	26	3	12%
LDEM	43	9	5	56%
VTSC	15	0	0	0%
Total	227	108	38	35%
Second Semester 2012—13				
Program	Applications	Admissions	Enrollment	% Yield
NTDT	34	16	10	63%
FSMT	15	7	3	43%
AGRI	8	4	3	75%
AGBU	23	6	6	100%
LDEM	17	1	1	100%
Total	97	34	23	68%

Graduate Applicants:

During the academic year 2012—13, a total of 140 graduate applications were received at FAFS of which 87 (62%) were accepted and 26 (30%) of those accepted were enrolled. Applications received in FTCH (42) were higher than those of last year 2011—12 (36); however, there was a decline of 15% in the cumulative number of applicants to the other graduate majors. Table 9 shows the numbers and percentages of graduate students who applied to FAFS, those who were admitted and those who enrolled.

Table 9: Number of Graduate Applications and Admissions

Fall, Spring and Summer 2012—13					
Program	Applications	Admissions	% Admitted out of applicants	Enrollment	% Yield
NUTR	58	27	47%	8	30%
FTCH	42	29	69%	9	31%
AGEC	9	7	78%	1	14%
IRRG	3	2	67%	1	50%
PLPT	4	3	75%	0	0%
PLSC	6	5	83%	4	80%
SOILS	1	0	0%	0	0%
ECOM	8	5	63%	1	20%
ANML	4	4	100%	0	0%
POSC	5	5	100%	2	40%
Total	140	87	62%	26	30%

Graduation 2012—13

FAFS graduated 110 undergraduate students in 2012—2013 distributed over the different majors as follows: Nutrition and Dietetics (24), Nutrition and Dietetics – Coordinated Program (14), Food Science and Management (18), Landscape Design and Ecosystem Management (24), Agriculture (10), Agribusiness (17) and Veterinary Science (3). FAFS also graduated 32 graduate students distributed over the different programs as follows: Nutrition (12), Food Technology (11), Plant Protection (3), Ecosystem Management (2), Irrigation (1), Plant Sciences (1), Animal Science (1) and Poultry Science (1). Tables 10 and 11 show the distribution of graduated students in the different disciplines at FAFS during past five years.

Table 10: Number of Graduated FAFS Undergraduate Students for the Last Five Academic Years

Major	08—09	09—10	10—11	11—12	12—13
NTDT	32	49	41	24	24
NTDT-CP	n.a.	17	20	18	14
FSMT	52	26	32	30	18
AGRI	8	9	16	29	10
AGBU	n.a.	1	4	20	17
LDEM	17	20	18	23	24
VTSC	n.a.	n.a.	1	1	3
Total Undergraduate	109	122	132	145	110

Table 11: Number of Graduated FAFS Graduate Students for the Last Five Academic Years

Major	08—09	09—10	10—11	11—12	12—13
NUTR	12	13	16	15	12
FTCH	8	9	3	13	11
AGEC	0	1	1	1	0
IRRG	3	0	3	0	1
PLPT	2	2	0	1	3
PLSC	0	0	0	0	1
SOIL	0	0	0	2	0
ECOM	1	1	0	3	2
ANML	2	1	2	0	1
POSC	2	1	0	0	1
Total Graduate	30	28	25	35	32

C. Centers and Units

Agricultural Research and Education Center (AREC)

Prepared by Hilal Dbouk, AREC Director

Introduction

Following the appointment of the AREC director, Mr. Dbouk, conducted a needs assessment of AREC and its future plans in regards to its infrastructure, assets, employees, relationship to AUB and FAFS.

Highlights

The following actions were taken during this period:

- An MOU was signed between AUB and ICARDA in December 2012 allowing ICARDA to utilize Agricultural land for its research projects. In 2013, the cooperation with ICARDA was strengthened and diversified in which ICARDA utilized additional land by renovating a building to establish its International Nursery at AREC. Currently ICARDA is planning to renovate another building to establish a Gene bank at AREC. A new agreement is expected to be signed in 2013 where ICARDA's research will cover more than 50% of AREC land as well as two major facilities. In addition to the educational and research benefits to AUB, this agreement is expected to have positive financial implications as well.
- UNIFERT cooperation and agreement was renewed with AREC with better financial and research conditions.
- A new Caterer, Casper and Gambini, was appointed to provide food services to the students and professors. This initiative is part of an overall strategy of AREC to have positive financial impact as well as positive effect on students and professors.
- A new Internet network was completed at AREC in June 2013 allowing AREC students, researches and administration to benefit from an up-to-date new infrastructure allowing better operations for all AREC facilities. Despite no allocated budget for the civil work, the project was completed by AREC physical plant with minimum budget. This network is now functional and positive feedback from students and professors can be noted based on the last survey conducted.
- Installation of 39 IP cameras surveillance system at AREC was completed in June 2013 that will improve the security and provide tighter control of the AREC operations.

- Renewed the agreement with AUBMC to provide them with dairy and poultry products and to make the products available at the AUB campus cafeteria. This decision allowed AREC to focus on whole- sale rather than on retail sales which will have a positive financial implications.
- AREC has given access to the Bekaa region farmers to using its machinery. This initiative has strengthened the role of : AREC /AUB in the area as well as improving the AREC's budget.
- The irrigation system and techniques that has always depended on Diesel/ Mazout to irrigate has adapted to using smaller electric pumps which will have better long term effects. Furthermore, a plan is on its way to look for additional source for water.
- Three external companies analyzed the energy consumption and recommended to sell the current, old and non-efficient generators and to replace them with two sets of generators that will decrease the Diesel/ Mazout expense. This is expected to happen after the approval of the capital budget and consultation with AUB physical plant.
- The first Botanical Garden in Lebanon was established through the support of the Australian Embassy(project completion January 2013). This garden will show the students/residents how to identify the many uses of plants (medicinal, foods etc.), learn the conservation techniques, explain in situ and ex situ conservation, and understand the importance of plant conservation and the threat to plant biodiversity.
- AREC new villa renovation was completed in November 2012 and refurbishing has begun. Moreover, a new design for landscaping is planned and execution expected March 2014.
- AREC main lounge renovation began October 2013 and was completed December 2013. Refurbishing is expected by mid oFebruary 2014.
- Renovation of the AREC infirmary was completed in March 2013.
- Renovation of the IT equipment such as projectors and computers for the classes at AREC has started and will be completed by December 2013.
- AREC library was upgraded with an online photocopier following approval from Jafet library management.
- Renovation of several AREC facilities took place during this year:
 - Guest houses: renovated and refurbished
 - Old store building: Now became International nursery for ICARDA
 - Employees quarter building
 - Dairy barn renovation

- Agronomy building
- Old chemical store building
- New AREC entrance gate
- New historical garden at AREC entrance was established
- Establish a central store for all AREC inventory products and establish an inventory system
- Renovation of a small lab for NCC operations.
- Started new look and content for the AREC website
- AREC is following closely with ESCWA, FAFS and FEA to establish a show case on a poultry house depending on renewable energy.
- AREC is following up closely with LDEM to establish a show case on a Greenhouse depending on renewable energy.
- AREC is co-ordinating with FEA to have them launch one of their research projects at AREC.

Teaching, Research and Community outreach

During the spring and summer semesters, a total of 32 Agriculture and LDEM students gained experiential knowledge in various agricultural and landscape fields at AREC. In addition, 15 students from the food science department got engaged in an internship program at AREC for four weeks. Moreover, several students completed their thesis program where they completed their research in various fields such as field crops poultry and dairy.

AREC's staff is engaged with various departments and AUB community in many teaching, research and community projects.

Highlights

- AREC hosted 20 students with Dr. Isam Bashour as part of Ag.21 5 course – Date: October 22, 2012.
- AREC hosted 40 students with Dr. Adib Saad as part of the Ag.201 course in which they were introduced to the different operations at AREC. November 14, 2012.
- Lebanon Reforestation Initiative held a workshop. November 5- 7, 2012.
- Dr. Halla Ghattas and Dr. Malek Batal held a workshop tottrain (23) health educators/teachers from public schools of Aarsal, Kwakh, Batloun and Hermel in the use of recently developed nutritional educational materials for school children. November 20, 2012.
- Dr. Halla Ghattas held a session on Nutrition Education and Communication class (NFSC 283) for (16) students and (30-35) Bedouin women. December 14, 2012.

- The International Center for Agricultural Research in Dry Areas (ICARDA) organized a training workshop on Food Legumes for researchers from different countries. April 8, 2013.
- A service Award party for Employees was held in the presence of Dean Houalla.
- Annual Janat Bladi foundation camp (30) attendees. April 14, 2013.
- AREC Day event took place with the participation of AUB community, faculty members, and students where more than 600 persons attended this event. April 21, 2013.
- The Lebanese Motor cross championship was organized for the first time at AREC. April 28, 2013.
- Lebanese Scouts camp at AREC. May 4— 5, 2013.
- Establishing a new garden in the area located between the administration parking and the clinic by 1st year students that are enrolled in the University Scholarship Program (USP). May 30—31, 2013.
- 80 eco-minded volunteer students from the Civil Engineering Society (CES) spent two days at AREC and provided assistance to AREC staff in the improvement of 2 facilities (the old incinerator building and the new NCC Lab). May 30— 31, 2013.
- Janat Bladi Foundation presented by Mrs. Rima Maalouf drew a painting at AREC cafeteria wall that includes the mission of AUB and FAFS. August 22—24, 2013.
- The Faculty of Agricultural and Food Sciences (FAFS) in collaboration with the German Agency for International Cooperation (GIZ) organized the annual conservation agriculture seminar for 40 students from 4 local agricultural faculties and researchers (Lebanese University, Saint Esprit university-Kaslik, Saint Joseph University, and AUB). September 12—14, 2013.
- Dr. Hussein Hajj Hassan, Minister of Agriculture, visited AREC. September 14, 2013.
- BEYOND, a Lebanese non-governmental organization, held several “Training of Trainees” workshops to provide health and educational consultancy for the Syrian refugees in Lebanon.
- Students from various Bekaa schools visited AREC throughout the year.

Several research projects were conducted at AREC with a main focus on poultry and crops research.

- Poultry Research:
 - Joint research between FAFS and Ministry of Agriculture was conducted at AREC on Newcastle disease virus funded by the private sector.
 - Thesis research was conducted by a graduate student: Nutritional values of de-hulled safflower meal for poultry conducted by Dr. Mohamad Farran.
 - Research Projects by Food sciences department conducted at AREC creamery.
- Crops Research
 - Comparison of No-till forage production (Field Corn, Barley, Vetch, and Barley/Vetch) to conventional system conducted by Dr. Issam Bashour.
 - Effect of Hydrogel water absorbent colloid on the survival of ornamental trees conducted by Dr. Issam Bashour with the assistance of AREC staff.

Strategic challenges

- Defining a new role for AREC vis a vis AUB and the region
- Transform AREC into an institution which is self-sufficient financially but still linked to AUB
- Partnering with the private sector

The Environment and Sustainable Development Unit (ESDU)

Prepared by: Dr. Salwa Tohmé Tawk, Research Associate and Dr. Shadi Hamadeh, Chairperson and Professor

Personnel

Shadi Hamadeh, ESDU Director
 Diana Marroush Abi-Said, Administrative-Financial Officer
 Mounir Abi-Said, Training and Organizational Development Specialist
 Ziad Moussa, Capacity Development and Outreach Officer
 Salwa Tohmé Tawk, Knowledge Management Officer/ Training and Organizational Development Specialist
 Mabelle Chedid – Executive Officer
 Dominique Anid – Health & Nutrition Officer

Highlights on ESDU activities during 2012—13

During the academic year 2012–13, ESDU was granted around 200,000 USD from private sector and different international donor agencies mainly the International Development Research Center (IDRC).

Regional Networking (KariaNet)

Knowledge Access for Rural Inter-connected Areas Network is a regional network for the management and sharing of knowledge, information and experience in agriculture and rural development in the Middle East and North Africa (MENA) region. A competitive call for an expression of interest to host KariaNet was launched and ESDU was selected to be the hosting organization. ESDU is assuming the responsibility of moderating the regional knowledge management network. This Network, inspired by 'open access principles', seeks to empower its members, through the use of ICT and non-ICT tools, to make knowledge available and timely accessible to farmers and practitioners involved in rural development. ESDU hosted a regional workshop "Social Media for Knowledge Management and Knowledge Sharing and Prospects for KariaNet Network Sustainability," which was attended by 11 representative members from the following nine countries: Algeria, Egypt, Jordan, Lebanon, Morocco, Palestine, Sudan, Tunisia and Yemen as well as the Senior Program Officer of the Regional Office of IDRC Cairo (International Development and Research Center).

Capacity Building: "Mainstreaming Evaluation Theory and Practice in the MENA Region"

The project is funded by IDRC and provides capacity development, small RandD grants for MENA specific evaluation research and publications, "Arabization," of evaluation methodologies and publications as well as virtual and face-to-face meeting and networking opportunities. One of the positive unintended outcomes of the project was the emergence of a MENA Development Evaluation Association (EvalMENA). ESDU is now developing the first of its kind online training on development evaluation in Arabic together with ten EvalMENA members from Jordan, Egypt, Lebanon, Palestine and Saudi Arabia, with the involvement of EvalPartners and the International Organization on Cooperation in Evaluation (IOCE) and the technical support of UNICEF which has been instrumental in providing the e-learning platform. Another initiative is translating to Arabic the eight webinar series of AEA (American Evaluation Association) and BetterEvaluation, as a complement to the Arabic material which will be available through the online training course.

Community Development: "Promotion of organic and local healthy products through a weekly farmers' market"

The project is funded by Waterfront City Cares (Majed Al Futaim Holding) started in

September 2012. Currently, the project is implementing a weekly farmers' market "Souk Aal Souk" on Wednesdays at Zico House, Spears to promote organically produced goods and build linkages between residents and local producers. In addition, a series of training sessions is targeting small-scale producers on organic production, food safety, and organizational and managerial skills to sustain the market.

Community-based Healthy Kitchens to provide locally-produced food aid for vulnerable groups affected by the Syrian Crisis

A partnership with the International Orthodox Christian Charity (IOCC) was initiated through pilot activities to establish community kitchens where ESDU implemented trainings for women on food safety practices and managerial skills.

Workshop: "Organic Agriculture: The Danish Perspective and a Lebanese Update"

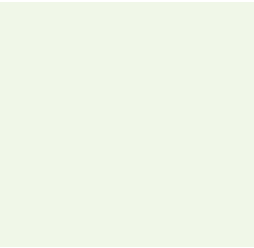
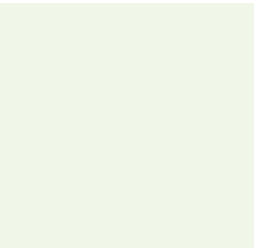
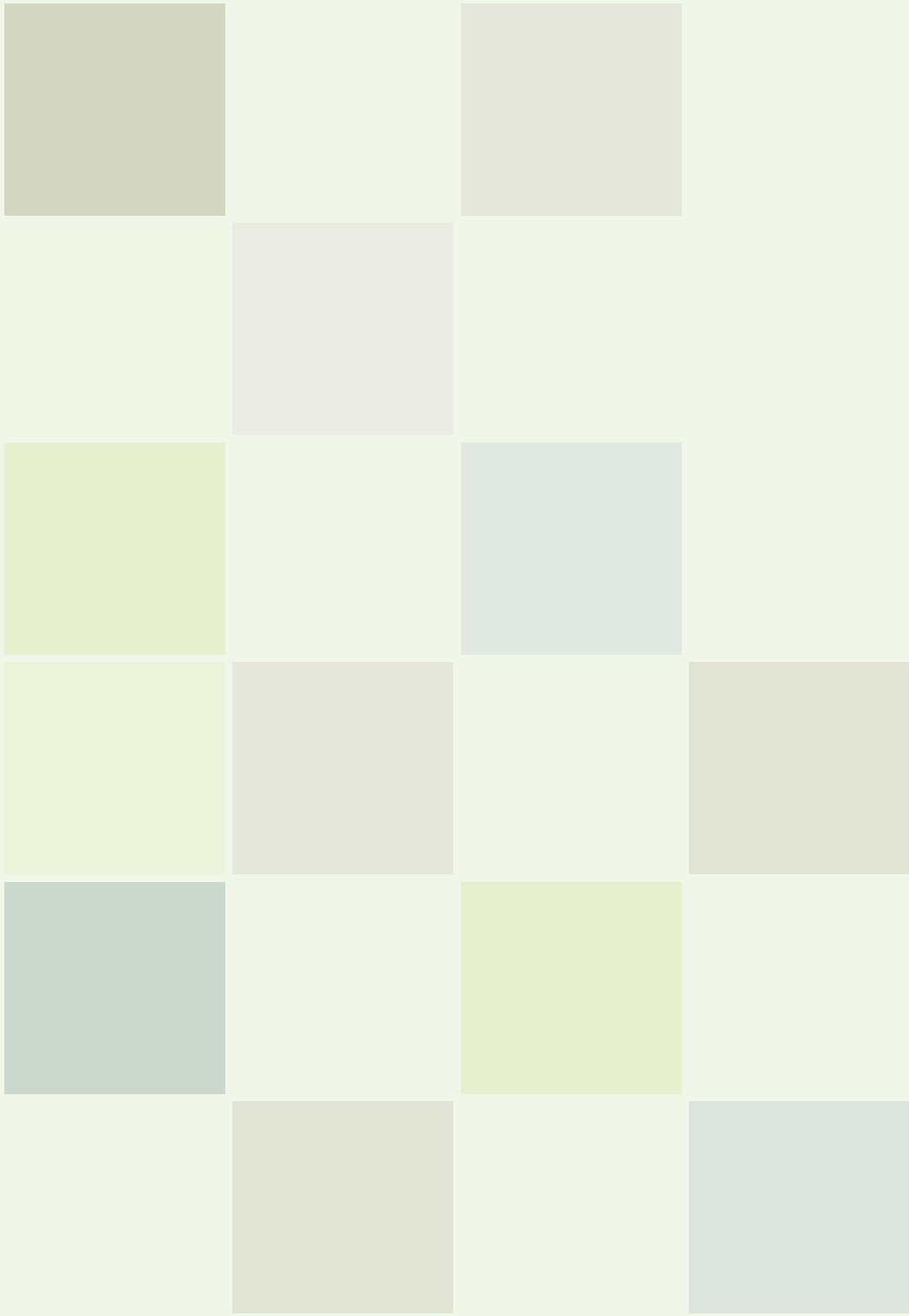
ESDU received from the part of the Danish ambassador in Lebanon an invitation to attend a three-week course on organic agriculture in Denmark sponsored by the Danida Fellowship Center (DFC) and facilitated by the Knowledge Center for Agriculture. As an outcome of this cooperation with the Danish embassy, a workshop was organized **on the Potential of Organic Production in Lebanon based on the Danish experience** under the patronage of Danish Ambassador Jan Top Christensen.

New Academic Program: "The RCODE Master of Sciences Program in Rural Community Development"

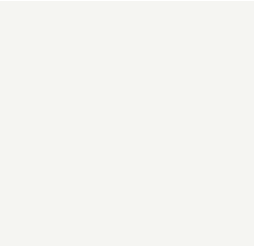
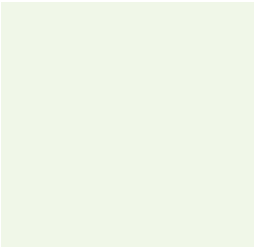
The RCODE program, initially developed in 2003, was updated by ESDU and approved by the Faculty of Agricultural and Food Sciences and the AUB administration. It is registered at the Lebanese Ministry of Higher Education. The program was reviewed and evaluated by Dr. David Brown from Cornell University (Professor at the Department of Development Sociology and co-Director of the Community and Regional Development Institute CaRDI at Cornell University) who visited AUB and highly recommended the program. The RCODE is currently in the process of registration in New York State Education Department and is expected to be launched in 2014.

Strategic Challenges

- To attract students for RCODE Master Program
- To sustain KariaNet regional knowledge management network
- To put Local Food Systems on the R&D regional and international agenda



III. Departmental Reports



A. Department of Agricultural Sciences

Prepared by: Dr. Shadi Hamadeh, AGSC Chairperson and Mr. Rami El-Husseini, AGSC Departmental Research Assistant

Highlights

The revised Agriculture curriculum will soon be presented for approval.

A new appointment for Chairman of the AGSC Department, as of February, 2013 was given to Dr. Hamadeh replacing Dr. Mustafa Haidar. A roadmap was set to complete the merger between the AGSC and AVSC Departments.

The Department formed a research committee to work on developing a departmental research strategy according to specialty using four-cluster organization of research teams.

- The department will continue to seek two Assistant Professor positions in Horticulture and in Agribusiness, respectively.
- Fifty-nine courses were offered, 47 undergraduate and 12 graduate courses. Five students earned an MS degree.
- Faculty members actively participated in workshops and conferences, locally and internationally to address olive oil, , tobacco, and plant health issues and strategies.

Faculty are also involved in providing services to the public sector as well as as membership in national committees

Personnel

The AGSC department has seven full-time faculty members, one visiting Professor, 16 part time faculty (total FTE:11.52 based on Fall semester data), two senior research assistants (one on a research grant), two full research assistants, and two research assistants appointed on research grant. Five graduate Assistants were appointed for the fall and spring semesters. The tables below detail the personnel in the Agricultural Sciences department.

Full-time Faculty

Adib Saad	Professor
Youssef Abou Jawdeh	Professor
Isam Bashour	Professor
Mustapha Haidar	Professor
Jad Chaaban	Assistant Professor
Ali Chalak	Assistant Professor
Hadi Jaafar	Assistant Professor
Amurugam Kantharajah	Visiting Professor

Research Professor

Musa Nimah	Research Professor
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Part-time Faculty

Efat Abou Fakhr Hammad	Senior Lecturer
Youssef El Khalil	Senior Lecturer
Salwa Tawk	Senior Lecturer
Boutros Madani	Instructor
Saada Dakdouki	Lecturer
Hashem El Hussein	Instructor
Rami Ollaik	Instructor
Solomon Bou Nacklie	Instructor
Ali Abboud	Instructor
Youssef Doughan	Instructor
Mohammad El Zein	Instructor
Hala Chahine	Senior Lecturer
Makram Bou Nassar	Lecturer
Hadi Tabbara	Lecturer
Kanj Hamade	Lecturer
Amer Najm	Instructor

Research Assistants

Lucia Hanna	Senior Research Assistant
Hana Sobh	Senior Research Assistant (on grant)
Rami El Hussein	Departmental Research Assistant
Rami El Helou	Departmental Research Assistant
Annbelle Sassine	Research Assistant (on grant)
Nay Ali Dia	Research Assistant (on grant)

Graduate Assistants

Ali Abdelsater	Fall 2012, Spring 2013
Rewa El Seblani	Fall 2012, Spring 2013
Jessica El Asmar	Fall 2012, Spring 2013
Alexandra Irani	Fall 2012, Spring 2013
Aiman Sleiman	Fall 2012, Spring 2013

Teaching

Fall 2012–13 Undergraduate

Course	Credits	Enrollment	Instructor(s)
AGSC 201	2.0	40	A. Saad
AGSC 204	1.5	29	M. Al Zein
	1.5	29	S. Dakdouki
AGSC 211	3.0	36	A. Chalak
AGSC 212	1.0	82	A. Abboud
	2.0	82	Y. Khalil
AGSC 213	3.0	15	H. El Housseini
AGSC 215	3.0	20	I. Bashour
AGSC 220	2.0	18	M. Haidar
	1.0	18	M. Al Zein
AGSC 221	3.0	5	E. Abou Fakhr
AGSC 232	3.0	13	Y. Abou Jawdeh
AGSC 236	3.0	10	H. Chahine
AGSC 235	2.0	13	S. Tawk
AGSC 239	0.0	20	H. Chahine

Course	Credits	Enrollment	Instructor(s)
AGSC 241	1.0	19	Y. Doughan
	2.0	19	Y. Khalil
AGSC 248	3.0	6	K. Hamade
AGSC 251	3.0	15	A. Kant
AGSC 262	3.0	6	H. Jaafar
AGSC 219	3.0	16	R. Ollaik
AGSC 292	3.0	7	M. Bou Nassar
	2.0	7	J. Chaaban

Fall 2012–13 Graduate

Course	Credits	Enrollment	Instructor(s)
AGSC 301	1.5	6	A. Chalak
AGSC 308	3.0	3	A. Kant
AGSC 312	3.0	3	I. Bashour
AGSC 310	3.0	3	H. Jaafar
AGSC 323	3.0	3	Y. Abou Jawdeh
AGSC 384	3.0	11	J. Chaaban
AGSC 395	1.0	4	M. Haidar

Spring 2012–13 Undergraduate

Course	Credits	Enrollment	Instructor
AGSC 201	2.0	44	A. Saad
AGSC 202	1.5	25	I. Bashour
	1.5	25	H. Jaafar
AGSC 203	1.5	29	A. Saad
	1.5	29	E. Abou Fakhr
AGSC 210	3.0	25	S. Bou-Nacklie
AGSC 212	2.0	84	Y. Khalil
	1.0	84	A. Abboud
AGSC 213	3.0	12	H. El Housseini
AGSC 222	0.25	14	H. Jaafar
	0.25	14	A. Kant
	1.0	14	M. Haidar

Course	Credits	Enrollment	Instructor
AGSC 224	3.0	12	A. Kant
AGSC 225	3.0	26	S. Tawk
AGSC 228	3.0	11	H. Jaafar
AGSC 229	3.0	10	B. Madani
AGSC 231	3.0	14	H. Tabbara
AGSC 240	0	17	J. Chaaban
AGSC 248	3	4	K. Hamade
AGSC 250	3.0	11	A. Kant
AGSC 253	3.0	10	H. Chahine
AGSC 255	3.0	16	J. Chaaban
AGSC 265	3.0	20	I. Bashour
AGSC 284	3.0	14	M. Haidar
AGSC 219	3.0	19	R. Ollaik
AGSC 292	2.0	9	H. Chahine
	3.0	9	M. Bou Nassar
AGSC 295	3.0	9	Y. Abou Jawdeh
AGSC 296	1.0	11	A. Saad

Spring 2012–13 Graduates

Course	Credits	Enrollment	Instructor
AGSC 301	1.5	7	A. Chalak
AGSC 324	3.0	3	I. Bashour
AGSC 376	3.0	7	A. Chalak
AGSC 388	1.0	4	Y. Abou Jawdeh
	1.0	4	E. Abou Fakhr
	1.0	4	M. Haidar
AGSC 395	1.0	2	Y. Abou Jawdeh

Summer 2012–13

Course	Credits	Enrollment	Instructor
AGSC 219	3.0	6	R. Ollaik
AGSC 223	2.0	11	M. Haidar
AGSC 226	3.0	11	A. Najm
AGSC 229	3.0	10	M. Bou Nassar
AGSC 236	3.0	7	J. Chaaban
AGSC 256	1.0	21	M. Bou Nassar

Completed Theses

- Mohamad Ali Khalife, Musa Nimah (Adviser), Irrigation. Deficit irrigation based on drought tolerance in tomato varieties.
- Rami Salem, Yusuf Abou Jawdeh (Adviser), Plant Science. Development of methods for the production of certified seed potato in Lebanon.
- Peter Abrahamian, Yusuf Abou Jawdeh (Adviser), Plant Protection. Molecular characterization of a newly introduced whitefly-transmitted *Crinivirus* and assessment of its synergistic interaction with other viruses in cucumber.
- Rewa El Seblani, Yusuf Abou Jawdeh (Adviser), Plant Protection. Molecular characterization of local microalgae, and evaluation of their potential use for biodiesel production and as plant disease control agents.
- Ali Abdel Sater, Yusuf Abou Jawdeh (Adviser), Plant Protection. Studies on the epidemiology of almond witches' broom (Alm WB) phytoplasma spread in south Lebanon, vector transmission and potential alternative hosts.

Research Funding

Internal Grants

University Research Board (URB)

- Chalak , Ali. Farmers' Willingness to Adopt Conservation Agriculture: The Case of The Beqaa Valley.

Local, Regional and International Grants

Three members of the AGSC department attracted national and international grants as below:

- Abou Jawdah ,Youssef. Production of biodiesel from Algae in selected Mediterranean Countries. European Union- European Neighborhood and Partnership Instrument (ENPI).
- Abou Jawdah ,Youssef. Development of Tomato with Multi-resistance to Yellow Leaf Curl Virus, Drought and Heat. Al-Balqaa Applied Univ., Jordan
- Abou Jawdah, Youssef. Diagnostic Analysis of Phytoplasma Disease on Stone fruits. Ministry of Agriculture.
- Abou Jawdah, Youssef. Plant and Insect Sample Analysis and Phytoplasma Transmission Trials. Ministry of Agriculture.
- Abou Jawdah ,Youssef. Control of new threatening cucurbit-infecting whitefly-transmitted geminiviruses in the Middle-East. Al-Balqaa Applied Univ., Jordan.
- Chalak (Co-Investigator), Ali. Alcohol control and harm reduction policies in Lebanon: The industry, the market and the young consumer. International Development Research Centre, Canada.
- Bashour, Issam. Study effect of Hydrogyl on Water-Holding Capacity of Soils and Growth of Trees in Lebanon Lebanon Reforestation initiative (LRI).

Publications

Internationally Refereed Journals (Corresponding/Senior author*)

Eight articles were published in internationally refereed journals by AGSC faculty members as indicated below:

- Bassil R. J., Bashour I. I., Sleiman F.T. & **Abou-Jawdeh Y.,*** 2013. Antibiotic uptake by plants from manure-amended soils, Journal of Environmental Science and Health, Part B: Pesticides, Food Contaminants, and Agricultural Wastes, 48:7, 570-574.
- Abrahamian P. and **Abou-Jawdah Y.,*** 2013. Detection and quantitation of the new world *Squash leaf curl virus* by TaqMan real-time PCR. Journal of Virological Methods 191: 76– 81.
- Abrahamian P., Seblani R., Sobh H., **Abou-Jawdah, Y.,*** 2013. Detection and quantification of two cucurbit criniviruses in mixed infection by real-time RT-PCR. Journal of Virological Methods 193: 320– 326.
- **Bashour, I.,*** Alameddine, L. Wehbe, A. Saad and **M. Nimah.** 2013. The use of aqua ammonia for the control of soil borne diseases in tomato. Lebanese Science Journal, 14 (1): 41-47.

- **Chalak, A.,*** Reid, S., Silcock, M. and Abiad, M. 'Customers' perspectives of water safety and service failure risks.' Journal – American Water Works Association. (Ali Chalak, Senior Author). (in press).
- Zhang, J., **Chaaban, J.,*** "The Economic Cost of Physical Inactivity in China", Prev. Med. 2013, Jan; 56(1):75-8.
- **Chaaban, Jad.,*** Karin Seyfert, Nisreen Salti, Gheed El Makkaoui, "Poverty and Livelihoods among UNHCR Registered Refugees in Lebanon", Refugee Survey Quarterly (2013) 32 (1): 24-49.
- Salti, N. and **J. Chaaban.,*** "The Political Economy of Attracting Public Funds: The Case of Lebanon," International Journal of Development and Conflict 02, 1250001 (2012).

Book Article or Chapters

- Bouamra-Mechemache, Z. and Chaaban, J. 2012. "Is the Protected Designation of Origin (PDO) Policy Successful in Sustaining Rural Employment?", in F. Arfini, M. Mancini and M. Donati (eds), Local Agri-food Systems in a Global World: Market, Social and Environmental Challenges, Cambridge Scholars Publishing, 2012 (ISBN 978-1-4438-3664-7).

Abstracts and Conference Proceedings(Corresponding/Senior author*)

- Quaglino F., Casati P., **Abou-Jawdah Y.,*** Choueiri E., Molino-Lova M., Tedeschi R., Alma A., Bianco P.A. 2013. High genetic homogeneity among Almond witches'-broom phytoplasma populations in Lebanon. Proceedings of the VI Italian meeting on phtoplasmas and phytoplasma diseases. Petria 23: 55-56.
- Casati P., **Abou-Jawdah Y.,*** Cominetti A., Quaglino F., Choueiri E., Molino Lova M., Tedeschi R., Alma A., Bianco P.A. 2013. Molecular identification of 'Candidatus Phytoplasma phoenicium' in spontaneous weeds in orchards in Lebanon. Proceedings of the VI Italian meeting on phytoplasmas and phytoplasma diseases. Petria 23: 21-24.
- Tedeschi R., Picciau L., Quaglino F., Casati P., Molino Lova M., **Abou-Jawdah Y.,*** Bianco P.A., Alma A. 2013. Preliminary survey of potential insect vectors of 'Candidatus Phytoplasma phoenicium' in Lebanon. Proceedings of the VI Italian meeting on phtoplasmas and phytoplasma diseases. Petria 23: 79-82.
- **Haidar, M.,*** and El-Husseini R. 2013. Fluridon a New Tool for *Orobanche ramosa* Control in Potato. Proceedings 66th Meeting of Western Society of Weed Science, March 11-14, San Diego, USA.
- **Haidar, M.,*** and Sabra A. 2013. A primary surveillance for invasive weeds in Lebanon. Arab and Near East Plant Protection Newsletter-ANEPPNEL 58, 4.

- Saoud P., **Haidar,M.,*** and N. Farajalla. 2013. Aquaculture/Agriculture systems to increase water productivity. WAS-Asia Pacific Chapter conference on Aquaculture in Arid Lands. Al-Ain, UAE, April 2013.

Services

Youssef Abou Jawdeh

AUB

- Member of the FAFS advisory committee.
- Member of the FAFS graduate studies committee.
- Others
- Member of the Pesticide Legislation committee, Ministry of Agriculture.
- Member of the Pesticide Scientific Committee, Ministry of Agriculture.
- Member of phytoplasma Management Committee. Ministry of Agriculture.
- Member of the vegetable Committee, Ministry of Agriculture.
- Board member 2011 –2013. Mediterranean Phytopathological Union (MPU), Italy.
- Member of The American Phytopathological Society APS MN. USA.
- Member of the Arab Society for Plant Protection, Beirut, Lebanon.
- Member of European Union COST Action FA0807: Integrated Management of Phytoplasma Epidemics in Different Crop Systems.
- Member of the international working group on Legume and Vegetable Viruses (IWGLVV).

Jad Chaaban

AUB

- Undergraduate Coordinator for the Agribusiness Program.
- Executive Committee elected member, Nature Conservation Center for Sustainable Future- IBSAR.
- Member, Issam Fares Institute for Public Policy and International Affairs, AUB.
- Member of the Interfaculty Financial Aid Committee.

Others

- President and Founding Member, Lebanese Economic Association.
- Expert, Middle East Youth Initiative - www.shababinclusion.org.
- Associate Researcher, Toulouse School of Economics, GREMAQ-INRA, France.
- Member, expert group for the UN-Lebanon National Consultations on the Post-2015 Development Agenda.

Ali Chalak

AUB

- Member of the FAFS Student Affairs Committee.
- Member of the FAFS Admissions Committee.
- Member of the FAFS Academic and Curriculum Committee.
- Member of the University Committee on General Education.
- Member of the Program Learning Outcomes Assessment Plan for the B.Sc. in Agriculture Committee.
- Member of the AUB Web Oversight Committee.
- Member of the University Publications Committee.
- Faculty Assistant Marshall in Commencement Ceremony.

Hadi Jaafar

AUB

- Member of ad-hoc Committee on second degree in Agriculture for Agribusiness Program.
- Member of ad-hoc Committee on B.S. in Agricultural program review.
- Member of the AGSC self- study program review committee.

Mustafa Haidar

AUB

- Chairperson of the AGSC department till February 15, 2013.
- Member in the FAFS Administrative committee till February 15, 2013.
- Member of the FAFS Academic and Curriculum Committee till February 15, 2013.

- Associate Chairman of AGSC the department, Feb. 15-Aug. 15, 2013.
- AREC Academic Coordinator.
- AGSC representative in the University Learning Outcomes Coordinating Committee.
- Member of Ad Hoc Committee on the Revised Sustainable Agriculture Program.
- Faculty Assistant Marshall in Commencement Ceremony.

Others

- Secretary and Treasurer, Arab Society for Plant protection.
- Elected member in the International Federation of Organic Agriculture Movement. (IFOAM) Working group-MENA-2012.
- Board member in the Lebanese Autism Society.
- Member of the National Organic Agriculture committee, Ministry of Agriculture.

Issam Bashour

AUB

- Member of the FAFS library committee.
- Member of the FAFS research committee.
- Member of the AGSC self study program review committee.

Others

- Follow up on conservation agriculture activities in Lebanon.
- Member of Fertilizer Committee at the Ministry of Agriculture. Lebanon.

Adib Saad

AUB

- Member of ad Hoc committee on the agriculture review program.

Others

- Executive Secretary of the International Agricultural Committee of the Lebanese Chamber of Commerce, Lebanon.
- Appointed by the Lebanese minister of Agriculture as a member of the National Committee on Stone Fruit Trees.
- Appointed by the Lebanese minister of Agriculture as a member of the National Committee on Pome Fruit Trees.

- Continued to serve as Senior Editor of "*Phytopathologia Mediterranea*", official journal, of the Mediterranean Phytopathological Union.

Participation in Workshops and Conferences

Youssef Abou Jawdah

- Attended the first meeting of the MED ALGAE Project, November, 25—27, 2012; Faculty of Science, Alexandria University, Alexandria, Egypt.
- Attended the meeting of the USAID working group on whitefly transmitted Cucurbit begomoviruses. Larnaca, Cyprus, January 24, 2013.
- Attended the regional meeting of the research group on "Breeding tomato for resistance to TYLCV and abiotic stress. Larnaca, Cyprus, January 23—24, 2013.
- Attended the workshop on algae identification techniques, held at the National and Kapodistrian University of Athens, in the framework of ENPI CBCMED project. "Production of biodiesel from Algae in selected Mediterranean Countries, MED-ALGAE". February 11—16, 2013.
- Attended the workshop on "Methodologies to improve phytoplasma DNA extraction from plants and insects"; Branišovská, Czech Republic, July 5—18, 2013.
- Attended and presented an oral summary of research activities on the project i.
- Attended and presented an oral summary of research activities for the project entitled "The National Program For The Improvement Of Olive Oil's Quality And Actions Against The Diffusion Of Stone Fruit Phytoplasma (Aid 9627)", December 10, 2012 organised by AVSI/ Italian Cooperation/ Ministry of Agriculture.
- Attended the Training workshop on Pest Risk Analysis, Beirut, March 12 – 21, 2013, organised by FAO/Ministry of Agriculture.
- Attended and presented a Seminar entitled "Results of Citrus and Stone Fruits Pest Surveys" that were conducted under the "Strengthening Production and Marketing of Lebanese Agricultural Products" project at the Lebanese University June 14, 2013 organised by FAO/Ministry of Agriculture.
- Attended and presented an oral summary of research activities for the project entitled "The National Program For The Improvement Of Olive Oil's Quality And Actions Against The Diffusion Of Stone Fruit Phytoplasma

(Aid 9627)_Phase II”, June 21, 2013 organised by AVSI/ Italian Cooperation/ Ministry of Agriculture.

Jad Chaaban

- Attended the conference on Food Security in Dry Lands in Doha, “Food Security in Lebanon”, November 2012 organised by Qatar National Food Security Program (QNFSP). Attended the Middle East Youth Initiative, Workshop on the Social-Economic Situation of Middle East Youth on the Eve of the Arab Spring, AUB, “The Impact of Remittances on Education in Jordan, Syria and Lebanon”, December 2012.
- Participated in the lecture “Economics of Civil Marriage in Lebanon”, organised by AUB Human Rights and Peace Club February, 2013.

Ali Chalakh

- Attended the Alcohol Policy 16: The 16th in a series of conferences on the avoidance of alcohol-related problems using public policy strategies held in Washington D.C., USA, from April 3–5, 2013.

Hadi Jaafar

- Participated in two meetings with the Ministry of Agriculture and several universities in Lebanon to coordinate research among the universities and to initiate a MOU for training Agriculture students in the Public Sector.

Mustafa Haidar

- Participated in the executive and organizing committee on the conversation Agriculture that was held in Germany, Dec. 2012. The meeting was sponsored by DAAD.
- Invited Speaker, The role higher education in promoting organic agriculture in Lebanon. Second Organic Conference in Lebanon on May 8, 2012, Lebanese University Compound in Hadath, Lebanon.

Consultancies

Ali Chalakh

- Benefits valuation for investment optimization – Dong Energy, Denmark, 2013.
- Customer Research (2014 Price Review) – South Staffordshire Water plc, UK 2013.

- Acceptability research in water and wastewater services – ICS Consulting Ltd., UK 2013.
- Second stage stated preference studies for various England and Wales water and wastewater companies, UK 2012–13.

Jad Chaaban

- EU ENPI-CBCMED and Municipality of Saida, Sustainable Urban Development Strategy (USDS) Project, Local Socio-Economic Expert 2012-14.

Hadi Jaafar

- Technical Advisory on XENDARIYA-MAHAWEEL IRRIGATION PROJECT for Team International, SAL.
- Technical Advisory on Akl Décor foundation inundation problem Analysis for Phi Prime Engineering.
- Pro-green Diploma - Team Member and advisor for course preparation.
- Self-study program review report preparation – Program Review Committee.

Strategic Challenges

Upon finalization of the departmental review process, strategic decisions will be made based on the findings. The research committee will prepare a research strategy that will explore future funding options to support research. The merger of the AVSC to consolidate production agriculture disciplines under one department will be completed. Two new faculty will be recruited in horticulture and agribusiness. A new agriculture curriculum will be finalized in the coming year.

B. Department of Animal and Veterinary Sciences

Prepared by Dr. Shady Hamadeh and Lina Jaber

Highlights

- Dr. Shady Hamadeh was appointed as chairman of the AVSC and AGSC Depts. as of October 1, 2012 and February 15, 2013, respectively. During this semester, a roadmap was set to complete the merger of the two Departments and streamline activities. Dr. Mustapha Haidar was appointed as Associate Chairperson and Lina Jaber as Assistant to the Chair.

- Dr. Susan Prattis, DVM, PhD, selected candidate for a visiting professor position at the AVSC Department, visited the Department between April 8–20, 2013 prior to her term beginning on August 16, 2013.
- The Department was active in the AUB DVM task force preparing for a Doctorate in Veterinary Medicine program to be offered at AUB.
- The Department was active in preparing proposals for the reestablishment of a Zoonoses Center at AUB as set in the Department's strategic plan.
- Seven graduate students were pursuing their Master's work of which three graduated.
- The Department was active in research and development with one internally funded project and 10 projects funded by external agencies.
- The Department faculty produced four abstracts and proceedings, four full articles in peer-reviewed international journals, and two chapters in books.

Personnel

The AVSC department has three full-time faculty members, one Research Professor and one part-time faculty member (total FTE: 3 based on fall semester data). The department also employs one Senior Research Assistant and one Research Assistant who is employed on research grant. Four Graduate Assistants were appointed for the Fall and Spring semesters. The department also has one support staff. The tables below detail the personnel in the Animal and Veterinary Sciences Department.

Full time Faculty

Shadi K. Hamadeh	Chairperson
Mohamed T. Farran	Professor
Elie K. Barbour	Professor

Research Professors

Fawwak Sleiman	Research Professor
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Part-time Faculty

Mounir Abi Said	Spring 2013
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Research Assistants

Lina Jaber	Senior Research Assistant
Nadim Rawda	Research Assistant on grant

Graduate Assistants

Diana Ahmadih	Fall
Georges Nassif	Fall
Ali Hammoud	Fall & Spring
Karl Hilan	Fall & Spring

Support Staff

Houssam Shaib	Senior Technician
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Teaching

Student enrollment in courses

Fall 12–13

Course	Credits	Enrollment	Instructor
AGSC 301	3 (50%)	6	Dr. Shady Hamadeh
AVSC 243	3	24	Dr. Hamadeh
AVSC 271	3	12	Dr. Farran
AVSC 275	3	18	Dr. Elie Barbour
AVSC 281	3	14	Dr. Mohamad Farran
AVSC 300B	2	1	Dr. Elie Barbour
AVSC 300B	2	1	Dr. Mohamad Farran
AVSC 304	3	4	Dr. Elie Barbour
AVSC 388	3	6	Dr. Hamadeh & Barbour
AVSC 395	1	2	Dr. S. Hamadeh

Spring 12–13

Course	Credits	Enrollment	Instructor
AGSC 301	3 (50%)	7	Dr. Shady Hamadeh
AVSC 220	3	45	Drs. Farran, Hamadeh and Barbour
AVSC 222	3	14	Drs. Hamadeh & Abi Said
AVSC 224	3	23	Dr. E. Barbour
AVSC 305	3	2	Dr. E. Barbour
AVSC 395	1	3	Dr. S. Hamadeh

Summer 2013

Course	Credits	Enrollment	Instructor
AVSC 226	3	11	Dr. M. Farran
AVSC 300B	2	1	Dr. E. Barbour

Research Funding

Internal Grants

Two faculty member received URB funds as below:

University Research Board (URB)

- Barbour, Elie. Development of a highly immunogenic vaccine to protective polypeptides of emerging H9N2-influenza virus mutants.
- Hamadeh, Shady. Survey and Quality Assessment of the small scale dairy sector in Mount Lebanon. URB

Local, regional and International Grants

Three members of the department were successful in attracting national and international grants as below:

- Barbour, Elie. Studies related to immunopotentiality, protection and production in the broilers administered ECIFIN against differently-timed Eimeria spp. challenge Barbour, Elie. Evaluation of Efficacy of Major Marketed Disinfectants Against Economic Microbial Etiologies of Poultry and Zoonotic Diseases. EWABO, Germany.
- Barbour, Elie. The impact of Essential® on production of broilers predisposed with Eimeria Spp.infection followed by a challenge with Clostridium perfringens. Mercordi, Belgium.
- Farran, Mohamad. Studies on the nutritional and feeding values of feedstuffs produced from locally cultivated and processed safflower, hemp and low toxin faba beans for poultry. LNCSR.
- Farran, Mohamad. Effect of Different Vaccines in Protection Against Velogenic Newcastle Disease in Broilers. Ministry of Agriculture.
- Farran, Mohamad. Effect of dietary lignocellulose on metabolizable energy and nutrient digestibility in poultry diets and on broiler performance under commercial settings. J. RETTENMAIER&SÖHNE, Germany.
- Hamadeh, Shadi. Outcome Mapping: Regional Capacity Building in MENA – Phase II. IDRC.

- Hamadeh ,Shadi. Promotion of organic and local healthy products through a weekly farmers' market. Waterfront City sarl.
- Hamadeh ,Shadi. Hosting the Regional Knowledge Management and Knowledge Sharing Network / ESDU – KariaNet Project. IDRC.

Publications

Internationally Refereed Journal (Corresponding/Senior author*)

Four articles were published in internationally refereed journals by AVSC faculty members as indicated below:

- **Barbour E.K.,***Hajj Z.G., Shaib H.A., Farran M.T., Araj G., Obeid F., Barbour K.E., Jirjis F., Saikaly P.E., Harakeh S. and Kayali G. 2012 Zoonotic potential of Proteus mirabilis isolates from chicken. Pathogens and Global Health, 106(6): 352-357.
- Iyer A., **Barbour E.,*** Azhar E., El Salabi A.A., Hassan, H.M.A., Qadri I., Chaudhary A., Abuzenadah, A., Kumosani T., Damanhoury G., Alawi M., Abdel Nour A.M., Harakeh S. 2013. Transposable elements in *Escherichia coli* antimicrobial resistance. Advances in Bioscience and Biotechnology, 4(3) 415-423.
- Harakeh, S., Saleh, I., Hawi, A., Mutlak, H., Hassan, A., Tayeb, S., Mahmoud, M., Azhar, E. Iyer, A. Kumosani, T., Niedweicki, A., Rath, M., and **Barbour E.,*** 2013. Preliminary study related to specific nutrient synergy-modulation of antimicrobial resistance of bacteria isolated from dairy products. African Journal of Microbiology Research Vol. 7(20): 2351-2358.
- Iyer,A., **Barbour E.,*** Azhar, E. Qadri, I., Chaudhary, A., Abuzenadah, A., Kumosani, T., Damanhouri, G., Bahijri, S., Al-Hejin, A., Abdel Nour, A.M., Harakeh, S. 2013. Bacteriophages in *Escherichia coli* antimicrobial resistance. Advances in Bioscience and Biotechnology 4(3) 469-476.

Abstracts and conference proceedings(Corresponding/Senior author*)

- Tohmé-Tawk, S., Abi Said, M., Abou Nasr, Y., and **Hamadeh, S.K.,*** 2013. Peri-urban agriculture and food security in the MENA region as related to enabling policy settings: a case study from Lebanon and Jordan. First International Conference on Global Food Security. 29 September - 2 October 2013, Noordwijkerhout, The Netherlands.
- Jaber, L.S., Duvaux-Ponter, C., **Hamadeh, S.K.,*** and Giger-Reverdin, S. 2013. Responses to a heat stress episode in lactating Saanen and Alpine goats. The 64th Meeting of the European Federation of Animal Science, 26-30 August, 2013, Nantes, France, Book of Abstracts (no. 19), p 258.

- **Barbour E.K.,*** 2013. The Multiple Factors Contributing to Dynamic Uncertainty of Future Livestock Production in Developed and Developing Countries. Keynote presentation, Proceedings of the International Conference on Animal and Dairy Sciences, July 23-24, 2013, Las Vegas, USA, in the Journal of Veterinary Science and Technology, 4(4):20.
- **Barbour E.K.,*** Ayyash, D.B., Ahmadiéh, D., and Shaib, H. 2013. A new model of Koch's postulate created by non-attenuated vaccine strains of *Eimeria* spp. in broilers. Proceedings of the International Conference on Animal and Dairy Sciences, July 23—24, 2013, Las Vegas, USA, in the Journal of Veterinary Science and Technology, 4(4):30.

Chapters in books

- Ghadban E., Talhouk S., Chedid M., **Hamadeh S.K.,***2013. Adapting a European Sustainability Model to a local context in Semi-arid areas of Lebanon. In: Methods and Procedures for Building Sustainable Farming Systems, Marta-Costa A.A. and Silva E. (eds). Springer Germany. pp 251-258.
- Jaber S., Chedid M., **Hamadeh S.K.,*** 2013. Water stress in small ruminants. In: "Responses of Organisms to Water Stress", Akinci S. (Ed), ISBN: 978-953-51-0933-4, InTech, DOI: 10.5772/53584. Available from: <http://www.intechopen.com/books/responses-of-organisms-to-water-stress/water-stress-in-small-ruminants>.

Services

Elie Barbour

AUB

- Member of the FAFS research committee.
- Member of the FAFS students affairs committee.
- Member of the FAFS Graduate Studies committee.
- Member of the AUB Task Force for DVM development.

Others

- Editorial Board of Veterinaria Italiana and the World Animal Health Organization Journals.
- Technical advisor to Jezzine beneficiary farms (150 farms).

Mohamad Farran

AUB

- Coordinator of undergraduate studies at FAFS.
- FAFS representative on the "Poultry Committee" at the Ministry of Agriculture.
- FAFS Representative on the National Feedstuffs Committee" at the Ministry of Agriculture.

Others

- Assisting several animal and crop farmers both directly and indirectly through NGO or UN organizations in Lebanon.
- Member of Board of Administration, Lebanese National Council for Scientific Research, October 14, 2003 to date.

Shady Hamadeh

AUB

- Chairman of the AVSC Department as of October 1,2012.
- Chairman of AGSC Department as of February 15,2013.
- Coordinator of the Environment and Sustainable Development Unit (ESDU).
- Member of the Advisory Committee.
- Member of the FAFS Strategic Plan Committee.
- Member of the AUB Task Force for DVM development.

Others

- Executive Board member of RUAF.
- Coordinator of the National Training Unit under the NEMTA project supported by IFAD.

Participation in Workshops and Conferences

Elie Barbour

- Participated and presented two presentations entitled: "A new model of Koch's postulate created by non-attenuated vaccine strains of *Eimeria* spp. in broilers", "The Multiple Factors Contributing to Dynamic Uncertainty of Future Livestock Production in Developed and Developing Countries" at the International Conference on Animal and Dairy Sciences, July 23—24, 2013, Las Vegas, USA.

Mohammad Farran

- Invited keynote speaker at the 2nd JRS Poultry Seminar on November 14, 2012 in Hannover, Germany. Presentation on: “The effect of ARBOCEL® on litter quality, nutrient digestibility and performance in broilers.”
- Dr. Farran, As VP of WPSA Lebanon –Branch and jointly with AUST, organized the annual meeting and the 50th anniversary of the WPSA Lebanon-Branch that was held on March 30, 2013, Rotana Hadath. And presented a specialized lecture on “Actual vs. tabulated amino acid values in feed formulation for poultry.”

Shady Hamadeh

- Invited to participate in the Food Security Debate. March 14, 2013, ESCWA, Beirut, Lebanon.
- Attended the 4th Annual Conference of the Arab Forum for Environment and Development: “Ecological footprint and survival options in the Arab countries,” November 29–30, 2012, Beirut, Lebanon.

Strategic Challenges

- The AVSC Department is merging with the Agricultural Sciences Department, this merger will consolidate all production agriculture disciplines in one department to better serve the students.
- The Department will start working under the strategic research theme that was set: “Adapting Food Systems to Climate Change in Arid and Semi Arid Areas”, and proposing projects under this umbrella.
- The Department will continue cooperating with the Faculty of Medicine for the development of a DVM program with Drs. Barbour and Prattis who are heavily involved in this task.
- The Department to establish a Zoonoses Center as part of its strategic plan and faces the challenge of finding the necessary funding resources. Three research proposals have been prepared:
- Establishment of a Salmonella serotyping activity in a developing Zoonoses Center at the American University of Beirut:
- Comparison of classical and a new rapid technology of Luminex x MAP for typing. To be submitted to Farouk Jabre Interfaculty Grant, AUB. Associated Research Unit to establish an action plan for monitoring zoonotic diseases in Lebanon. Submitted to LNCSR, Lebanon Editorial Board of Veterinaria Italiana and the World Animal Health Organization Journals.

C. Department of Landscape Design and Ecosystem Management

Prepared by: Dr. Salma Talhouk, Chairperson and Ms. Nadine Modad, LDEM Departmental Research Assistant

Highlights

Department academic activities.

- **Department academic activities. New Professional Bachelor of Landscape Architecture approved:** *Talhouk S.N., Makhzoumi, Abunnasr, and Talhouk R.* completed the review and name change of the undergraduate program and received approvals from the university and the Ministry of Higher education. A transition phase for current students has been put in place and first BLA graduates are expected in 2014.
- **Forthcoming New Professional Masters in Landscape Architecture:** *Talhouk, Al- Akl, Trovato and Makhzoumi* are preparing a license-awarding graduate degree in landscape architecture open to all undergraduate fields with an advanced status for holders of design degrees (expected completion date: Spring 2013-2014).
- **Forthcoming New Masters of Sciences:** *Zurayk and Talhouk* are preparing a new graduate degree to replace the current Ecosystem Management Interdisciplinary program (expected completion date: Spring 2013-2014).
- **Forthcoming two minors:** *Talhouk S.N. and Talhouk R.* are preparing a minor in landscape design and one in landscape horticulture (expected completion date: Spring 2013-2014).
- **A Proposal for the TEMPUS IV, 6th call was prepared but was not submitted before the deadline in March 2013:** The proposal was prepared by *Talhouk S.N., Trovato and Modad* and was entitled “modernizing graduate studies in Landscape Architecture: towards Environmental Sustainability in natural, rural, and urban ecosystem by Safeguarding community needs and land resources”
- **Preparation of program self-study document:** *Talhouk S.N. and Talhouk R.* are preparing a self-study for submission to the American Society of Landscape Architects (ASLA) for accreditation of the undergraduate program (expected submission date: Fall 2013-2014).

New Faculty

The Department recruited four new faculty members for the landscape architecture vacant positions as listed below:

- Professor, Christer Bengs (Chief Researcher at Aalto University, School of Engineering (Finland); requested to delay his appointment until Fall 2013/2014).
- Assistant professor, Maria Gabriella Trovato (Professor at the Mediterranean University of Reggio Calabria, Italy).
- Visiting Assistant Professor, Yaser Abunnasr (PhD Candidate in Regional Planning (ABD), University of Massachusetts, Amherst, USA).
- Lecturer, Nayla Al-Akl (Owner & Managing Principal, Nayla Al-Akl Landscape Architecture, Lebanon).

New Appointments

The Department hosted Associate Professor Landscape Architect, Larry Harder, from Guelph University, Canada on sabbatical leave during the Fall term 2012–2013. L. Harder taught one theory course and one studio course during his stay. Larry Harder was also appointed as Adjunct Associate Professor in the LDEM Department for a period of one year effective June 2013.

Advertised positions

The department advertised the vacant faculty position for a candidate holding a PhD in Landscape Architecture or related fields replacing Ms. J. Weltzien who left the department at the end of January 2013 to undertake a PhD scholarship in Germany effective Spring 2013-2014.

Extracurricular activities

Faculty members of the Department conducted many activities to enhance student learning experience.

- **Planning for an international student's workshop:** Dr. Maria Gabriella Trovato is coordinating on behalf of the department the prospect of hosting the LandWorks workshop in Lebanon next year. Founded in 2011 by landscape architects, Prof. Stefan Tischer in collaboration with Dr. Annacaterina Piras, LandWorks is implemented in collaboration with local communities and representatives. It aims at revitalizing contemporary landscapes by selecting particularly sensitive, degraded, unstable landscapes and focusing on environment, architecture and culture. The department invited Dr. S. Tischer and Dr. A. Piras, during April 18-20, 2013 to hold initial talks and visit potential sites.

- **Annual Plant Sale:** S. Talhouk, M. Fabian and LDEM I students organized as part of an experiential learning experience on plants and people, the department's annual plant sale in front of AUB's West Hall on April 3, 2013. The sale which was planned and supervised by S. Talhouk and M. Fabian generated around 2,000,000 LBP. This amount was deposited in the department's revolving fund to sustain experiential learning activities.
- **Book Signing event:** the department (S. Talhouk, N. Modad and R. Talhouk) organized, a book signing and reading by Authors event for two of its faculty members Dr. Rami Zurayk and Dr. Jala Makhzoumi on November 27, 2012. The authors read excerpts from the following books (1) Makhzoumi, J. and G. Pungetti (co-editors). (2011). *The Right to Landscape. Contesting Landscape and Human Rights: Shelley Egoz.* Ashgate Publishing, London; (2) Makhzoumi, J. *Horizons 101.* (2010). Dar Omboz, Beirut; (3) Zurayk, R. and S. Abdul Rahman. (2008). *From 'Akkar to 'Amel: Lebanon's Slow Food trail.* Slow Food Foundation for Biodiversity; (4) Zurayk, R. (2011). *War Diary: Lebanon 2006.* Just world publishing. 59 pp. ISBN 978-1-935982-09-8.
- **Landscape Dialogues 2013:** The department (S. Talhouk and N. Modad) organized in collaboration with the CCECS (R. Shibli), 'Landscape Dialogues 2013' featuring the outcome of an interdisciplinary collaboration between AUB students from the department of landscape design and ecosystem management (LDEM IV), and AUC (American University in Cairo) students from the Department of Rhetoric and Composition on April 8, 2013. The student teams used the final year LDEM students projects as the basis for their collaboration. They conducted joint field visits to project sites, exchanged ideas, debated issues, and learned to work in a cross-disciplinary environment. The student project themes are: Landscape Heritage, Militarized Landscapes, Right to Landscape, Landscape and Ecosystem Health, and Landscape and Development. The event was organized by final year design studio teachers, R. Shibli, N. Al-Akl and M.G. Trovato, to allow students to showcase their collaborations and their joint visions for change.
- **IBDAA:** 12 groups consisting of 2-4 students from the LDEM department (under the guidance of N. Al-Akl, N. Farajalla, W. Melhem) participated in IBDAA annual event at AUB this Spring term 2012–2013. It is an annual event organized by the Nature Conservation Center (NCC), that gives undergraduate and graduate students the possibility to participate in a full-fledged poster forum. The projects tackled nature, its conservation, its challenges, and/or its use, from a variety of viewpoint. The theme for IBDAA 2013 was **"Water and Biodiversity"**.
- **Garden Show 2013:** Students designed and implemented the department stand at the garden show spring festival in May 2013 under the guidance of N.

Al- Akl and M. Fabian. The stand this year consisted of an interactive stand that elaborated on the idea of the “Greenwall for all” which develops the idea of the green wall by providing a design that can be implemented by all with minimal difficulty and that requires minimal skills or maintenance. The green wall project is a collaboration between S. N. Talhouk and M. Fabian with the center for civic engagement and community service (CCECS) at AUB as well as the AUB Neighborhood Initiative.

- **Jounieh by Bike festival:** Students promoted Xeriscaping and the use of native plants in landscape design during the event which was held in June 2013. Posters explaining the concept were presented and bouquets of native plants were offered to bikers and passers by during the event showcasing the different uses of the plants readily available in the Lebanese landscape. These efforts were coordinated by N. Al-Akl as part of the department visibility plan.
- **Photography:** students, staff and faculty members were encouraged by Y. Abunnasr to participate in a three month photography workshop (November, 2012 to January 2013). This workshop was sponsored by the Andrew Mellon Foundation Grant to support the arts and humanities at AUB. Y. Abunnasr was awarded best image in the “I on AUB” Photography Exhibition in May 2013.

Seminars

- **Public lecture:** The LDEM Department & The Center for Civic Engagement and Community Service (*R. Shibli and N. Modad*) organized a public lecture entitled “Barrio Granada, Managua, Nicaragua -- A Case Study in Community Engagement: Landscape Design as a Catalyst for Community Development” given by *Larry B. Harder* visiting Landscape Architect from Guelph university and Adjunct Associate Professor (January 2013).
- **LandWorks Seminar:** The department (*M. trovato, N. Modad and R. Talhouk*) organized a seminar by landscape architects, Stefan Tischer and Annacaterina Piras, on ‘LandWorks’, the operative workshop for the international festival of ephemeral artistic installations on April 18, 2013. The seminar presented LandWorks Sardinia 2011 and 2012 which resulted in site specific experimentation with artistic installations valorizing particularly sensitive places in western Sardinia.

Involvement in interdisciplinary and interfaculty activities

Faculty members of the department were actively involved in university wide centers and programs. For example:

- **ESDU:** Dr. Y. Abunnasr participated in the development of farmers market

for the ESDU unit at FAFS for grant received under corporate social responsibility.

- **FARMERS’ MARKET Design presentations:** the LDEM department (*Y. Abunnasr and LDEM III students*) organized in collaboration with the Environment and Sustainable Design Unit (ESDU) at AUB, the Farmers’ Market Student Design Presentations of the project on “the promotion of organic and local healthy products through a weekly farmers’ market” supported by Waterfront City Cares and attended by the company administration on February 15, 2013.
- **FAFS:**
 - **Presentation about AREC Potentials:** As part of the LDEM 228 (Ecological Landscape Design II) studio course, third year LDEM students conducted an extended inventory of energy, water, waste, landscape vegetation as ecosystem benefits, building condition, street and lighting condition, signage, and agricultural practices under the supervision of their teacher *Y. Abunnasr*. The students’ findings were presented to FAFS Faculty and AUB Administration on March 22, 2013.
 - **Student Life at AREC documentary:** LDEM III students produced a documentary related to their academic experience at AREC. This documentary which was produced by student Kristelle Boulos with participation from her peers was presented to FAFS Faculty and AUB administration on March 22, 2013.
 - **AREC Executive Villa Garden:** Second year students lead by Mrs. N. Al-Akl and W. Melhem (LDEM246) during the spring term 2012–2013, conducted a class competition for the design of the AREC Executive villa. Students met with Dean Hwalla and AREC Director, Hilal Dbouk, to discuss and propose 3 options for the garden design.
- **IFI:** Dr. N. Farajalla serves as the Faculty Research Director of the Climate Change and Environment in the Arab World Program at the Issam Fares Institute for Public Policy and International Affairs (IFI). He is directing the research program for the Climate Change and Environment in the Arab World Program at IFI which resulted during 2012–2013 in two seminars and associated policy briefs and six research papers. Furthermore he facilitated the signing of a memorandum of understanding between AUB and the University of Sao Paulo to study the economic impact of climate change on the various sectors of the Lebanese economy.
- **IGESP:** Dr. R. Zurayk is serving as the director of IGESP Interfaculty Graduate Environmental Sciences Program (IGESP) and is leading the review and drafting of a proposal for a new IGESP program to become part of the Division of University Interdisciplinary Programs (DUIP) as the

Environmental Studies program, while Dr. N. Farajalla is assisting on the new IGESP program curricular review.

- **NCC:** Dr. Salma Talhouk is leading two projects under AUB's Nature Conservation Center (NCC); the *Biodiversity Village Award (BVA)* which involves 18 village communities in ecological planning through participatory mapping workshops, and *Nature ConVersation* which seeks to produce a set of extracurricular activities that enables schools to contribute to nature conservation with their students.
- Dr. Salma Talhouk and Dr. Jala Makhzoumi (Associate to the Faculty) also participated as moderators in NCC's *Ta3a Ne7ke*, an annual debate series held by the center.

Department outreach activities

- **School visits to the greenhouse area:** The department received around 165 students from IC to learn about plants and miscellaneous activities such as composting.
- **University for seniors:** the department offered a course on campus landscape trees and shrubs which included historical overview and campus tours. The course was taught by Dr. S. Talhouk, Mr. G. Battikha and Mrs. M. Fabian. As a total, 25 participants attended all three sessions.
- **Department visibility:** Mrs. N. Al-Akl developed a visibility plan for 2012–2013 to promote academic programs and faculty research. In line with the strategy, the department supported the participation of students in a competition organized by the private sector (Plus Properties) and targeting 6 universities. Two LDEM II won 1st and 2nd prize for their landscape design proposals and the event was covered by press, TV and viral advertising.
- **Greenhouse area Open house:** first year Landscape Architecture students and their teachers Dr. S. Talhouk and Mrs. M. Fabian organized an open house on May 8, 2013 at the greenhouse area in collaboration with the American Women Society in Lebanon. A total of 515,000 LL was raised and the money will be used to support the rehabilitation of the greenhouse area to better serve student learning. The event was conceived to allow students to invite family and friends and introduce them to some of what they have been doing during spring semester. The focus was on the landscape horticulture course and the landscape design fundamentals I studio. Visiting parents were guided by 'student hosts'.

Space and facilities

- **Planning for Outdoor Educational Facilities:** Dr. Abunnasr, Dr. Talhouk S. N., Mrs. M. Fabian, and Mrs. M. Abou Rahal completed a study and a design

proposal to optimize the use of the Outdoor space in the greenhouse area for educational and outreach activities of the department.

Personnel

The LDEM department had eight full time faculty members, 12 part time faculty members (Total FTE:10.18 based on First Semester data) and thirteen research assistants out of which eight were appointed on grants. Five graduate assistants were appointed for the academic year 2012–13. The department has one support staff. The below tables detail the personnel in the Landscape Design and Ecosystem Management department.

Full Time Faculty

Salma N. Talhouk	Professor and Chairperson
Yaser Abunnasr	Visiting Assistant Professor
Nayla Al Akl	Lecturer
Monika Fabian	Instructor
Nadim Farajalla	Associate Professor, Faculty Research Director of Climate Change and Environment in the Arab World (IFI)
Maria Gabriella Trovato	Assistant Professor
Julie Weltzien	Lecturer
Rami Zurayk	Professor; Director of IGESP

Part Time Faculty

George Battikha	Senior Lecturer
Hala Chmaitelly	Lecturer
Yasmina Choueiri	Lecturer
Bachar El-Amine	Lecturer
Sara Hage	Lecturer
Zeina Kronfol	Instructor
Wissam Melhem	Lecturer
Ramzi Mezher	Lecturer
Halim Nader	Lecturer
Maha Nasrallah	Lecturer
Rabih Shibli	Lecturer
Mariana Yazbek	Senior Lecturer

Research Assistants

Nadine Modad	Departmental Research Assistant (2007—present)
Mayssa Abou Rahal	Part-time Research Assistant with Yaser Abunnasr to complete study on LDEM green house teaching area
Mona Bitar	Part-time Research Assistant (Spring 2012—2013); Dr. Maria Gabriella Trovato (seed money)
Marlene Chahine	Part-time Research Assistant (Spring 2012—2013); Dr. Maria Gabriella Trovato (seed money)
Rouba Dagher	Full-time Research Assistant (LDEM; Dr. Salma Talhouk)
Dr. Saker El Nour	Postdoctoral Researcher (on LSE Project, Dr. Rami Zurayk)
Cynthia Gharios	Full Time Research Assistant (on LSE Project, Dr. Rami Zurayk)
Anne Gough	Full-time Instructor (September 1, 2012 to February 28, 2013), on grant, Dr. Rami Zurayk/ Rural development project).
Antoine Khalil	Part time Research Assistant (on grant; Dr. Salma Talhouk/ NCC)
Wassim Kays	Full-time Field Expert (on grant; Dr. Salma Talhouk/NCC)
Rasha Talhouk	Full-time Research Assistant curriculum development and reviews and program accreditation (June 2011– present).
Lama Yasmin Tawk	Full-time Research Assistant (on grant; Dr. Salma Talhouk/ NCC)
Mirna Choueiry	Part-time Research Assistant (from course time buy-out due to involvement with the Climate Change and Environment in the Arab World Program at IFI; Dr. Nadim Farajalla)

Graduate Assistants

Safia Alajlan	Ecosystem Management
Eleni Assaf	Ecosystem Management
Farah El Samarai	Ecosystem Management
Moustapha Itani	Ecosystem Management
Sara Moledor	Ecosystem Management

Support Staff

Elias Abi Samra	Greenhouse Technician
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Teaching

Courses Offered

During the academic year 2012—13, the Department offered a total of 35 undergraduate courses, 2 seminars and 1 graduate course. Among the undergraduate courses (9) were design studios and (26) were lecture based courses.

Student Enrollment in Courses

Fall 2012—13

Course	Credits	Enrollment	Instructor(s)
LDEM 200	4	35	N. Al-Akl (P)/R. Mezher
LDEM 203	3	18	R. Zurayk
LDEM 204	6	20	L. Harder (P)/ J. Weltzien/ M. Yazbek
LDEM 207	3	38	M. G. Trovato
LDEM 209	4	36	S. Talhouk/M. Fabian (lab)
LDEM 216	6	22	Y. Abunnasr (P)/ S. Hage
LDEM 217	3	22	R. Zurayk/ R. Talhouk (lab)
LDEM 230	3	24	N. Farajalla
LDEM 241	6	22	R. Shibli (P) / N. Al-Akl/ J. Weltzien/ M. Trovato/M. Yazbek
LDEM 260	3	8	L. Harder
LDEM 264	3	9	G. Battikha
LDEM 290	3	19	N. Al-Akl
LDEM 291	3	18	W. Melhem (P)/ H. Nader
LDEM 295	1	22	M. G. Trovato

Spring 2012—13

Course	Credits	Enrollment	Instructor(s)
LDEM 202	4	30	M. G. Trovato (P)/R. Mezher/ Z. Kronfol
LDEM 208	3	42	B. El Amine
LDEM 211	3	33	S.Talhok(P)/ M. Fabian (lab)
LDEM 212	3	23	G. Battikha
LDEM 218	3	21	M. Yazbek
LDEM 228	6	19	Y. Abunnasr (P)/ Y. Choueiri
LDEM 230	3	32	N. Farajalla
LDEM 231	3	19	N. Farajalla
LDEM 242	6	22	Rabih Shibli(P)/ N. Al-Akl/ M.G. Trovato
LDEM 246	6	22	N. Al-Akl (P)/W. Melhem
LDEM 251	3	23	H. Jaafar
LDEM 263	3	19	M. Yazbek
LDEM 265	3	19	G. Battikha (P)
LDEM 291	3	33	H. Nader (P)/ W. Melhem
LDEM 296	1	22	N. Al-Akl
LDEM 630	3	11	R. Zurayk

Summer 2012—13

Course	Credits	Enrollment	Instructor(s)
LDEM 208	3	19	B. El Amine
LDEM 216	4	29	M. Nasrallah (P)/ H. Chmaitelly
LDEM 219	1	32	M. Fabian
LDEM 221	1	22	M. Yazbek
LDEM 231	3	22	N. Farajalla
LDEM 247 (year II)	3	22	N. Farajalla
LDEM 247 (year III)	3	20	W. Melhem
LDEM 252	3	29	W. Melhem
LDEM 292	2	3	N. Al-Akl

Completed Theses and Thesis Advising

- Graduate students enrollment: The graduate students' enrollment in the ECOM program for the academic year 2012—13 was eight current students and one new student. Of these students eight have chosen thesis option and one has chosen the project option.
- PhD students advising: LDEM Faculty are serving as co-advisors to one PhD student in Bangor University, Wales, UK (*S. Talhouk*), one PhD student at the Mediterranean University of Reggio Calabria, Italy (*M. G. Trovato*), and as committee members to one PhD student in Environmental engineering (*R. Zurayk*) and two Urban Design Masters students (*Y. Abunnasr* and *M.G. Trovato*) at AUB.

Completed theses

MSc student	Thesis or Project Title	Advisor	Date of Graduation
Tala El Khatib	Project "Land Tenure and Farming Systems Canges in the Jabal Amel Region of South Lebanon"	Dr. Rami Zurayk	Spring 2012—13
Noura Hazim	Assessment of the potential of establishing extensive green roofs at the American University of Beirut	Dr. Salma Talhouk	Summer 2012—13

Theses in progress

MSc student	Thesis or Project	Advisor	Expected Date of Graduation
Safia Al Ajlan	Thesis	Dr. Michel Bariche (Biology Dep.)	Fall 2013/2014
Eleni Assaf	Thesis	Dr. Nadim Farajalla	Spring 2013/2014
Bassam Hamzeh	Thesis	Dr. Salma Talhouk	Fall 2013/2014
Moustapha Itani	Thesis	Dr. Salma Talhouk	Fall 2013/2014
Farah Al Samarai	Thesis	Dr. Rami Zurayk	Fall 2013/2014
Sara Moleodor	Thesis	Dr. Salma Talhouk	Fall 2013/2014
Lama Tawk	Thesis	Dr. Salma Talhouk	Spring 2013/2014

Research

Research Retreat

The department held a research retreat in November 2012 and identified the following current and future topics of interest to be used as a basis for graduate program development and research collaboration between faculty:

Special Landscapes:	Themes and Disciplines:
<ul style="list-style-type: none"> - The Landscape In Between - Brown -fields - Degraded and Devastated Lands - Productive Landscapes (aesthetic and recreational landscapes) - Waterfront (water related landscapes) - Demarcating Lines: Landscapes of Contestation 	<ul style="list-style-type: none"> - Urban and Peri-urban - Landscape and Tourism - Landscape Archaeology (design and protection of archaeological sites) - Cultural Heritage - Political Ecology (power politics and landscapes) - Urban Ecology and Greening - Landscape Urbanism - Nature and Biodiversity Conservation
Infrastructure, Planning and Policy:	Frameworks, Methods and Approaches:
<ul style="list-style-type: none"> - Governance of Territory - Post-War Landscape Architecture - Climate Change and Landscape Mitigation (technology and sustainability) - Landscape Planning at Different Scales - Green Infrastructure (land-use, land change and greenhouse emissions) - Infrastructure (private and public landscapes) - Monitoring the Landscape and Landscape Changes 	<ul style="list-style-type: none"> - Site Remediation - Landscape and Green Technology (components and materials) - Building Resilience Landscapes - Human-Landscape Interaction and Awareness - Community-Based Approach to Landscapes - Water, Food Security, and Climate Change

Research Funding

Local, Regional and International Grants

Two faculty members were successful in attracting national, international and development grants as below:

- Talhouk, Salma. Nature Conversation: Developing school guide for extra-curricular nature-related activities (NCC–AUB). Duration: 2011 – 2014. Funded by Coca Cola Foundation.

- Talhouk, Salma (NCC–AUB). Biodiversity Village Award 2013. Duration: July 2013 – August 2014. Funded by Coca Cola Foundation.
- Talhouk, Salma (Co-PI), (NCC–AUB). Biodiversity Conservation Program. Duration: 2012 – 2013. Funded by Scholl Foundation.
- Zurayk, Rami (IGESP-AUB). The Palimpsest of Agrarian Change. Duration: 2012-2015. Funded by London School of Economic (LSE).

Publications

In line with the department mission and research agenda listed below:

- Relationship between rural landscapes and livelihood
- Landscape planning approach to nature and rural heritage conservation
- Conservation and sustainable use of native flora
- Relationship between landscape design, education and human behavior
- Water conservation, climate change and their impact on urban and rural landscapes.

A total number of six articles in international refereed journals were published by the LDEM faculty members as indicated below.

Internationally Refereed Journals (*Corresponding/Senior author)

- **Abunnasr, Y.,***Hamin, E., and Babec, E. (accepted for publication August 2013). Windows of Opportunity: Addressing Climate Uncertainty Through Adpatation plan implmentation. Journal of Environemntal Planning and Management.
- **Zurayk, R.,***. 2012. Reflections on the growing worldwide local food movement. Journal of Agriculture, Food Systems, and Community Development. Volume 3, Issue 1, 3pp. ISSN: 2152-0801 online. December 16, 2012.
- Abboud, M., Makhzoumi, J, Clubbe, C., **Zurayk, R.,*** Jury, S., and **Talhouk, S.,*** 2012. Riparian habitat assessment tool for Lebanese rivers (RiHAT): case study Ibrahim River. BioRisk. 7: 99–116
- Ghattas, H.*, Barbour, J., Nord, M., **Zurayk, R.,*** Sahyoun, N. Household food security is associated with Agricultural livelihoods and diet quality in a marginalized community of rural Bedouins in Lebanon. *The Journal of Nutrition*. doi: 10.3945/jn.113.176388 online. August 14, 2013

- **Zurayk, R.,*** 2013. Civil war and the devastation of Syria's food system. *Journal of Agriculture, Food Systems, and Community Development*. ISSN: 2152-0801 online. March 19, 2013.
- **Zurayk, R.,*** 2012. Asking the right questions. *Journal of Agriculture, Food Systems, and Community Development*. Volume 3, Issue 1, 3pp. ISSN: 2152-0801 online. December 16, 2012.

Articles in other Journals

- **Farajalla, N.,*** Executive summary for UNDP's Arab Water Report. 2012.
- **Zurayk, R.,*** and A. Gough. 2012. "Control Food, Control People: The Struggle for Food Security in Gaza" Institute of Palestine Studies. November 2012.

Book Article or Chapters

- **Farajalla, N.S.,*** 2013. "Future Water Supply and Demand in the Gulf States," in Tauris, I.B. *Water and Food Security in the Arabian Gulf*. Emirates Center for Strategic Studies and Research, Abu Dhabi.
- **Zurayk, R.,*** and Gough, A. 2013. Bread and Olive Oil: The Agrarian Roots of the Arab Uprising. In: Gerges, F. (ed). *The New Middle East: Protest and Revolution in the Arab World*. Cambridge University Press.
- Myntti, C., Mabsout, M and **Zurayk, R.,*** 2012. Through Thick and Thin: The American University of Beirut Engages Its Communities. In: McIlrath, L, Lyons, A. and Munch, R. (eds.). *Higher Education and Civic Engagement*. pp 205-219. ISBN: 978-0-230-34037-4.

Abstracts and Conference Proceedings (Corresponding/Senior author *)

- S. Tohme Tawk, M. Abi Saiid, **Abunnasr, Y.,*** S. Hamadeh*. Peri-urban agriculture and food security in the MENA region as related to enabling policy settings: A case study from Lebanon and Jordan. First Global Conference on Food Security, Noordwijkerhooft, Netherlands, (accepted in 2012 as poster presentation for conference dates September 29—October 02, 2013).

Dissertation Manuscript

- Abunnasr, Y. 2013. Climate Change Adaptation: A Green Infrastructure Framework for Resilient Urban Region. University of Massachusetts Amherst.

Services

Yaser Abunnasr

AUB

- Member of the ad hoc committee for the LDEM Program Learning Outcome Assessment.
- Member of the ad hoc committee for the Master's program development.
- Member of the ad hoc committee for the revision of the LDEM undergraduate program.
- Lead faculty member for the design and redevelopment for the Green House Project (with S. Talhouk).
- GIS laboratory lead coordinator (with N. Farajalla).
- Student orientation presentation-International College (IC) students.
- Member of the prestigious Areen Architecture Award Jury in the Architecture and Design. Department to select the three best architecture cap stone for monetary prizes.
- Student advising.
- Jury member for final semester projects for second and third year design studios.
- Jury member for the final year architecture studios.
- Guest Lecturer in Dr. Adib Saad's class to introduce landscape architecture as a professional field of study.

Others

- Jury member and grading committee member for the graduate masters projects at the "Institute D'urbanisme" at ALBA, Beirut (February 08, 2013).

Nayla Al-Akl

AUB

- In charge of the development of the Department and program visibility plan for 2012—13.
- Academic advisor for the Landscape Student Society.
- Attended and represented AUB at student competition of the Tilal Bhersaf area organized by Plus Properties as a jury member.
- Communication between students and communications office for student photo competition.

- Started efforts in organizing International Landscape Conference for April 2014.
- Started efforts in organizing inter-department student competition to take place in April 2014.
- Invited two school students from Saints-Coeurs Sioufi, to attend a class session and discussed the potential of the field and the possibility of them joining the school.
- Coordinator of the department and student participation at the Garden Show Spring Festival May 2013.
- Set up internship base forms and preliminary contacts to promote student involvement in the business world.

Monika Fabian

AUB

- Member of the University for Seniors program (Spring 2012— Present).
- Coordinates school students visits to the greenhouse area and offer miscellaneous horticultural activities.

Others

- Advising on greenroof plantation projects using native species in Beirut.

Nadim Farajalla

AUB

- Faculty Director of the Research and Policy Forum on Climate Change and Environment in the Arab World at the Issam Fares Institute for Public Policy and International Affairs (IFI) American University of Beirut.
- Chairperson of the University's Student Affairs Committee.
- Member of the Advisory Committee for the University's Center of Teaching and Learning.
- Member of the FAFS Admissions Committee.
- Member of the FAFS Research Committee.
- Member of the FAFS Student Affairs Committee.
- Liason officer between FAFS and the FAFS Alumni Chapter.

Others

- Composed an article for the Heinrich Boell Foundation on Climate Change and Water Resources in the MENA region: <http://www.lb.boell.org/web/51-995.html>

- Reviewer of UNDP's Arab Water Report.
- Invited expert on ESCWA's and Swedish International Development Cooperation Agency's (SIDA) Vulnerability Assessment Working Group, part of the "Regional Initiative for the Assessment of Climate Change Impacts on Water Resources and Socio-Economic Vulnerability in the Arab Region."

Salma Talhouk

AUB

- Chairperson, Department of Landscape Design and Ecosystem Management (LDEM).
- Member of FAFS strategic plan committee.
- Member of the Executive Committee of NCC (AUB's Nature Conservation Center), 2010—present.
- Chair of the ad hoc committee for the revision of the LDEM undergraduate program.
- Chair of the ad hoc committee of the LDEM Program Learning Outcome Assessment.
- Chair of the ad hoc committee for the development of a Master's program at LDEM.
- Senate Secretary.
- Member of the Office of International Programs advisory committee.
- Member of FAFS Advisory committee.
- Member of FAFS Administrative committee.

Others

- Leading a National Biodiversity Village Award event.
- Preparing school extra-curricular nature activity-related guide.
- Leading national tree-planting campaign.
- Reviewer for the UNDP small grants program.
- Member of the Biodiversity and genetic varieties of olives committee at the Ministry of Agriculture.

Maria Gabriella Trovato

AUB

- Member of the Library Committee.
- Member of the Graduate Studies Committee.
- Member of the ad hoc committee for the Master's program development.
- Member of the ad hoc committee for the revision of the LDEM undergraduate program.
- Contributed to the revision of the IV TEMPUS proposal entitled "Modernizing graduate studies in Landscape Architecture: towards Environmental Sustainability in natural, rural, and urban ecosystem by Safeguarding community needs and land resources."
- Promoted a cycle of lectures and/or conferences in Landscape architecture.
- Coordinator of the LANDWORKS seminar.
- Coordinator of the landscape student participation at the LANDWORKS Sardinia Workshop 2013.

Julie Weltzien

AUB

- Member at the AUB Choral Society.
- Student exchange program Coordinator with the Workshop_atelier / terrain (WAT) of the UNESCO Chair in Landscape and Environmental Design of the University of Montreal (CUPEUM).
- Served as the Landscape Student society's academic adviser.

Rami Zurayk

AUB

- Member of the Interdisciplinary Programs Committee 2011—present.
- Director of the Interfaculty Graduate Environmental Sciences Program.
- Member of the University Research Board.
- Member in Interfaculty Committee on Capacity Building in Food Security.
- Member of FAFS Advisory Committee.
- Chair of FAFS Research Committee.

Others

- **Reviewer (Articles):** Journal of Coastal research, 2013.
- **Reviewer (Abstracts):** 19th LAAS International Science Conference. April 5-6, 2013.

Participation in Workshops and Conferences

Yaser Abunnasr

Invited talks:

- *"The Impact of Climate Change on Urban Livelihoods - Spatial Urban Planning and Land Use Tools" Third Regional Summer School: An Introduction to Natural Resource Governance in the Arab Middle East and North Africa. Amman, Jordan. September 1—5, 2013.*
- *"Urban Green Spaces Policy in Lebanon", AUB, November 8, 2012.*
- Joint Initiative on Climate Uncertainty workshop: *"A Climate-Adaptive Planning Process to Manage Time Uncertainty." Abstract was accepted and then withdrawn by author. Lisbon, Portugal November 8—9, 2012.*
- Poster presentation First International Conference on Urban Sustainability and Resilience, UCL, London: *"Green Infrastructure for Resilient Urban Regions: Measuring Ecosystem Services in the Urban Region of Boston". Abstract was accepted then withdrawn by author. UCL, London, November 10—11, 2013.*

Nayla Al-Akl

- Jury member to several design studios on landscape and architecture at AUB and ALBA.
- Attended workshop organized by Nadim Karam at Atelier Hapsitus, investigating new approaches to urban design and planning.
- Attended the conference Build it Green Lebanon, the 4th annual sustainability solutions conference.

Nadim Farajalla

Invited talks:

- *"Lebanon's Coastal Aquifers" at the Expert Meeting on "Assessment of Risk and Uncertainty Related to Coastal Aquifer Management in the Mediterranean." UNESCO – IHP, GEF – UNEP and Akdeniz Antalya, Turkey, October 4—5, 2012.*

- “Flood Hazard in Lebanon and the Role of Climate Change, International Day for Disaster Risk Reduction Environmental Health, Safety and Risk Management Department. AUB, October 15, 2012.
- “Overview of Landscape Approach – Tools and Instruments for Natural Resource Management.” Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH and the League of Arab States Beirut, Lebanon, October 9 – 10, 2012.
- – *Building Bridges: Energy, Water and Climate Change – Building Bridges between Europe and MENA*, organized by: “EU – WANA Bridge Building - Research Opportunities in Climate Change Impacts on Water Resources in Agriculture,” Cyprus Institute and Deutsches Elektronen-Synchrotron (DESY) A Research Centre of the Helmholtz Association, Nicosia, Cyprus: *the EWACC 2012*, December 10–12, 2012.
- Participated and represented AUB at the Annual Coordination Meeting for the Water and Livelihood Initiative (WLI) in Cairo, Egypt, October 9–10, 2012.
- Member of the official Lebanese delegation to the UN’s 18th Conference of Parties (COP 18) for climate change negotiations Doha Qatar, December 3–7, 2012.
- Attended the Arab Water Week conference and was part of panel/roundtable discussion group at the the Regional Partnership on Culture and Development’s (RPCD) Regional Workshop “Improving the Adaptive Capacity of Water Managers in the MENA Region.” Amman, Jordan. January 26, 2013.
- Attended an Expert meeting on Vulnerability Assessment as part of the Regional Initiative for the Assessment of Climate Change Impacts on Water Resources and Socio-Economic Vulnerability in the Arab Region. January 30, 2013.
- Participated in a workshop on Water, Scarcity, Risk and Democracy in the Mediterranean. Athens, Greece. April 12–13, 2013.
- Participated in the Global Conference on Water at the College of Wooster organized by the Great Lakes Colleges Association and Global Liberal Arts Alliance. Wooster, Ohio. June 24–27, 2013.

Salma Talhouk

- Attended by invitation : a Plant Life of SW Asia 8 Conference, session title: Botanic Gardens: ex-situ collections and native plant reserves, held at the Royal Botanic Garden, Edinburgh, Scotland. July 1–5, 2013.

Maria Gabriella Trovato

- Attended a workshop: Development of Landscape Character Assessment as a tool for effective conservation of natural heritage in the Eastern Mediterranean, “MEDSCAPES held in Larnaca, Cyprus. January 28–29, 2013.
- Invited to be part of the Professors Staff a short-term URB Faculty Development Grant: The workshop participants included landscape architecture students and invited faculty from different countries who realized a number of on-site projects to underline the significance of the landscape, the natural and cultural heritage of Caprera Island. This workshop also opened new perspectives and opportunities for future development. M. Trovato’s role included training of the international groups inside of the operative workshop to project and create site specific artistic installations on the landscape, as well as giving lectures to the international students during the days of the workshop. Held at LandWorks and the Alghero Faculty of Architecture, Italy, La Maddalena Archipelago Natural Park. May 23–June 2, 2013.

Julie Weltzien

- Guest speaker: 4D_ Dance Design-Design Dance, Lebanon at the Environmental Utterance’ Conference’. supported by the Mellon Foundation University College Falmouth, UK:., September 1–2, 2012.

Rami Zurayk

- Gave a talk on: at the Farmers and Revolution symposium: Food Farming and Freedom revisited in Food, AUB, January 22, 2013.

Consultancies

Yaser Abunnasr

- Consultant to the Faculty of Agricultural and Food Sciences (FAFS) on design of facilities for the packaging laboratory: Y. Abunnasr

Nayla Al-Akl

- Design proposal and coordination for the AREC main lounge renovations including accessibility to and from new building.

Nadim Farajalla

- Environmental management plan for a development project in Makkah, KSA: N. Farajalla is working on this project since September 2011 to present.

It involves protecting Hema and wadis. The plan involves reducing pollution in urban areas from various sources and a plan to recycle and reuse treated sewage effluent.

- Involvement in organizing and running workshops on the RIO+20 and the COP 17 meetings.

Salma Talhouk

- Consultant for botanic garden development in Abu Dhabi, UAE.

Strategic Challenges

During this past year, securing approval process for the revised undergraduate program and recruiting new Faculty has been completed. Below are the additional challenge that will be addressed this year:

- Finalizing the new graduate Masters of Landscape Architecture program.
- Securing accreditation for the new undergraduate curriculum.
- Securing space for two additional studios and space for jury sessions.
- Upgrading greenhouse area.
- Organizing the study abroad program for LDEM students.

D. Department of Nutrition and Food Sciences

Prepared by: Dr. Zeina Kassaiy, Chairperson

Highlights

During the period of September 1, 2012 — August 31, 2013, the Nutrition and Food Sciences Department witnessed several changes that contributed to its growth and development. Actions were taken by the department as follows:

- The final steps have been taken to complete stages of the accreditation process for the Nutrition and Dietetics Coordinated program. Reviewers from the Accreditation Council for Education in Nutrition and Dietetics (ACEND) visited the NFSC Department in which they reviewed documents, held meetings with faculty, students, Chairperson, and the Dean. During their visit they had on site visits to the hospitals and interviewed preceptors and students. The reviewers submitted their report October 2013 for the final decision.

- The NFSC department welcomed the external reviewers Drs. Connie Weaver and Daryl Lund that held meetings with the Chairperson, the Dean, the faculty members (professorial and non-professorial ranks) and student representatives in addition to the Provost and the IRC chair. A report was submitted and shared with the Faculty.
- The NFSC department had a booth with nutrition and food safety activities at the Sciences Days October 18 -20, 2012. where
- Drs. Kassaiy and Abiad and Ms. Reem Hamzeh with Mr. Samson Atamian, organized a 3 week applied HACCP training workshop in collaboration with SMG (Sustainable Management Group) and CSA (Canadian Standards Association) during September and October, 2012. The workshop trained students in creating and applying a HACCP plan to any food facility by making use of the different processing lines located in the pilot plant as a food processing facility.
- The NFSC department and AUB endorsed the joint statement with UNICEF, WHO and the Ministry of Health on the “Optimal Infant and Young Child Feeding in Emergencies’ in Lebanon,” which the government will disseminate to all humanitarian agencies in Lebanon.
- The NFSC department, AUB and the Lebanese Academy for Nutrition and Dietetics (LAND) organized a conference “Ensuring a Healthy Start for the Pediatric Population” on December 7, 2012 supported by the Coca Cola Foundation.
- The NFSC Department organized Nutrition and Dietetics Career workshop “Workshop on Internships and Masters Opportunities in Lebanon and Internationally,” upon request from the Nutrition Student Society on December 13, 2012. The workshop raised awareness of the Coordinated Program in Dietetics (CP) as well as other clinical internships in Lebanon and internationally
- Dr. Kassaiy prepared a formal action plan after receiving feedback from the NFSC Department.
- Dr. Omar Obeid received the Innovative Biomedical Research Award 2013—201) for his project : Glycemic index of bread: fiber or minerals? This is the question. Budget: 10, 000US\$.
- Dr. Hala Ghattas received the Innovative Biomedical Research Award for her Project entitled: The role of dietary phosphorus in the development and progression of NAFLD in rats. Budget: 10, 000US\$.
- Dr. Abiad with the assistance of the NFSC Department organized a 4-day seminar series on Food Packaging in collaboration with the United States

Agency for International Development (USAID) and ACDI/VOCA, Farmer-to-Farmer program. The lectures covered topics on the role of packaging in maintaining product quality and safety, shelf life modeling, barrier, migration and product-package interaction, packaging of fresh produce, post-harvest handling and modified atmosphere packaging (map), as well as sustainability and recycling. Two experts in packaging were invited: Drs. Bruce Harte and Rafael Auras from the School of Packaging at Michigan State University. The seminar series was well attended by 124 individuals representing local and international universities and agencies.

- The NFSC Department exposed and promoted the Food Science program and its graduates at the HORECA foodservice expo that was held in BIEL, Beirut, Lebanon on April 9–12, 2013.
- Dr. Kassaify organized two Servsafe training sessions (The Advanced Food Safety Certification by the American National Restaurants Association) for NFSC students conducted by Mr. Mahmoud Wazzan in February 2013.
- The NFSC departments' graduate assistants participated in the AUB fair for High school students promote the different programs offered on April 15 – 26, 2013.
- Dr. Kassaify initiated a culinary workshop for the NFSC students/graduates conducted by Mr. Mahmoud Wazzan held a culinary workshop for the NFSC students/graduates for a period of 10 weeks held at the pilot plant between February and May 2013.
- Ms. Joanna Abou Rizk and Ms. Nivine Bachir, two graduate students in the NFSC program, received the Graduate Students Travel Award from the Faculty of Agricultural and Food Sciences to attend the 20th International Congress of Nutrition taking place in Granada, Spain on September 15–20, 2013.
- The academic status of Ms. Carla Murad and Ms. Marie-Claire Chamieh will be changed from instructors to lecturers as both of them have earned their PhD degrees from the Faculty of Social Sciences and Health, University of Durham. This will be effective as of the new academic year 2013–14.
- Dr. Lamis Jomaa joined the department as Visiting Assistant Professor for the Fall 2013–14.

Personnel

The NFSC department has 13 full-time faculty members including four instructors, six part-time faculty members (total FTE:14.61 based on first semester data), one research associate and five research assistants out of which three are appointed on research grants. Thirteen graduate assistants were appointed for the fall semester, 19 for the second semester and five for the summer session. The department has four support staff. The tables below detail the personnel in the Nutrition and Food Sciences department.

Full-time Faculty

Nahla Hwalla	Dean, Professor
Zeina Kassaify	Chairperson, Associate Professor
Imad Toufeili	Professor
Omar Obeid	Professor
Ammar Olabi	Associate Professor
Lara Nasreddine	Assistant Professor, Coordinator of Undergraduate Studies in Nutrition & Dietetics
Mohammad Abiad	Assistant Professor
Hala Ghattas	Assistant Professor
Farah Naja	Assistant Professor
Marie-Claire Chamieh	Instructor
Basma Hamadeh	Instructor
Dima El Halabi	Instructor
Rachel Close	Instructor

Part-time Faculty

Jamila Natour	Lecturer
Carla Habib	Instructor
Youssef Habbal	Lecturer
Hamza Daroub	Instructor
Sara Ghandour	Instructor
Reem Hamzeh	Instructor

Research Assistants

Sara Farhat (on grant)
Monia Hamdan
Reem Hamzeh
Shatha Saredidine
Dareen Shatila (on grant)

Graduate Assistants

Fall 2012—13

Graduate Assistant	Major
Rita Helou	Nutrition
Nivine El Alami	Nutrition
Omar Dib	Food Technology
Nadera Hamdar	Nutrition
Maya Mokdad	Food Technology
Rasha Zgheib	Nutrition
Katherine Jaafar	Food Technology
Jinane Makki	Nutrition
Nathalie Joy Malek	Food Technology
Nadine Najjarine	Food Technology
Marah Aqeel	Nutrition
Jennifer Ayoub	Nutrition
Hiba Chatila	Nutrition

Spring 2012—13

Graduate Assistant	Major
Omar Dib	Food Technology
Nadera Hamdar	Nutrition
Maya Mokdad	Food Technology
Rasha Zgheib	Nutrition
Jinane Makki	Nutrition
Nadine Najjarine	Food Technology
Marah Aqeel	Nutrition
Jennifer Ayoub	Nutrition
Hiba Chatila	Nutrition
Mariam Halabi	Nutrition
Karine Ismail	Nutrition
Karina Merhi	Nutrition
Farah Houmani	Food Technology
Romy Abi Fadel	Nutrition
Lina Abdouni	Nutrition
Rola Hammoud	Nutrition
Mariam Assaad	Food Technology
Nathalie Barakat	Food Technology
Leila Fawaz	Food Technology

Summer 2012—13

Graduate Assistant	Major
Maya Mokdad	Food Technology
Nadera Hamdar	Nutrition
Jennifer Ayoub	Nutrition
Rasha Zgheib	Nutrition
Rita Helou	Nutrition

Support Staff

Samson Atamian	Pilot Plant Supervisor
Tania Ghannam	Secretary
Samir Touma	Technician
Arsine Derboghossian	Technician

Teaching

Student Enrollment in Courses

Fall 2012—13

Course	Credits	Enrollment	Instructor
NFSC 220	3	49	C. Murad
NFSC 221	3	65	M. Chamieh
NFSC 222	3	28	H. Ghattas
NFSC 240	2	46	M.C. Chamieh
NFSC 252	3	21	Y. Habbal
NFSC 261	3	22	J. Natour
NFSC 265	3	46	I. Toufeili
NFSC 267	2	32	B. Hamadeh
NFSC 274	3	43	O. Obeid
NFSC 277	3	52	Z. Kassaify
NFSC 282	3	21	R. Hamze/ L. Naoufal
NFSC 283	3	14	H. Ghattas
NFSC 284a	1	14	D. Halabi
NFSC 288	3	33	A. Olabi/B. Hamadeh
NFSC 292	3	39	P. Karam/A. Barhoumi
NFSC 294	1	39	R. Close
NFSC 296 (one section)	1	15	D. Halabi
NFSC 298F	0	14	R. Close
NFSC 299	2	17	F. Naja
NFSC 301	3	7	H. Tamim
NFSC 307	3	16	F. Naja
NFSC 311	3	15	L. Nasreddine
NFSC 314	3	14	O. Obeid
NFSC 370	3	6	Olabi
NFSC 377	3	9	M. Abiad
NFSC 395	1	14	M. Abiad

Spring 2012—13

Course	Credits	Enrollment	Instructor
NFSC 220	3	49	C. Murad
NFSC 221	3	48	F. Naja
NFSC 261	3	52	I. Toufeili
NFSC 267	2	25	B. Hamadeh
NFSC 272	3	19	S. Ghandour
NFSC 278	3	21	Z. Kassaify
NFSC 284b	1	14	D. Halabi/R. Close
NFSC 285	3	48	F. Naja/ MC. Chamieh
NFSC 287	2	61	M. Abiad
NFSC 289	1	60	B. Hamadeh
NFSC 290	3	40	D. El Halabi
NFSC 291	3	26	M. Abiad
NFSC 293	3	39	L. Nasreddine
NFSC 295	1	38	R. Close
NFSC 296	1	20/24	M.Chamieh/A. Olabi
NFSC 298S	0	14	R. Close
NFSC 299	2	45	A. Olabi
NFSC 301	3	7	H. Tamim
NFSC 305	3	6	A. Olabi
NFSC 310	3	8	I. Toufeili
NFSC 308	3	12	L. Nasreddine
NFSC 312	3	10	O.Obeid/ N. El Helou
NFSC 315	3	11	O. Obeid
NFSC 395	1	7	O. Obeid

Summer 2012—13

Course	Credits	Enrollment	Instructor
NFSC 261	3	26	I. Toufeili
NFSC 274	3	10	O. Obeid
NFSC 277	3	20	Z. Kassaify
NFSC 280	1	18	M. Abiad

Completed Theses

A total of 15 theses were completed in 2012–13 as below:

- Nesrine Abou Mehdi, Imad Toufeili (Advisor), Role of the Intrinsic and Extrinsic Product Attributes in the Purchase Intent of Honey.
- Hayat Hatab, Zeina Kassaify (Advisor), The Implementation of a Customized Food Safety System in Community Kitchens in Rural Lebanon.
- Nour Hammami, Farah Naja (Advisor), Validity and Reproducibility of a Food Frequency Questionnaire among Lebanese Children (5-10 years old) for the Assessment of Energy and Nutrient Intake.
- Patricia Tabarani, Mohamad Abiad (Advisor), The effect of an Altered Processing Method on the Microbiological, Sensory and Chemical Properties of Arishi Whey Cheese.
- Ruba Hajj Ahmad, Ammar Olabi (Advisor), Roles of Fat and Extrinsic Attributes in the Purchase Intent of Strained Yoghurt (Labneh).
- Joanna El Hayek, Hala Ghattas (Advisor), Development of Low-Cost Sample Diets for Adults Living in Rural Areas of Lebanon using Linear Programming Models.
- Nivine El Alami, Omar Obeid (Advisor), Comparison of Cardio Metabolic Risk Factors and Pre Diabetes between Urban and Rural Non Diabetic Lebanese Adults.
- Jana Hazim, Omar Obeid (Advisor), The Acute Effects of Phosphorus Supplementation on Postprandial Blood Lipid Responses in Healthy Male Adults.
- Nivine Bachir, Farah Naja (Advisor), Optimal Cut-Offs of BMI, Waist Circumference, and Percentage Body Fat for Predicting Metabolic Syndrome among Lebanese Adults.
- Jeanette Karam, Lara Nasreddine (Advisor), Dietary Exposure to Essential and Toxic Trace Elements from a Total Diets Study in Lebanese Children and Adolescents.
- Patricia Moghames, Farah Naja (Advisor), Validity and Reproducibility of a Food Frequency Questionnaire among Lebanese Children (5-10 years old) for the Assessment of Food Groups.
- Darine Hahem, Lara Nasreddine (Advisor), Determining Body Mass Index, Waist-to-Height Ratio, Percent Body Fat, and Conicity Index Cut-Off Values Associated with Metabolic Abnormalities in Lebanese Children and Adolescents.

- Joanna Abou Rizk, Farah Naja (Advisor), Complementary and Alternative Medicine use Dietary Practices and Food Security among People Living with HIV and AIDS (PLWA) in Lebanon.
- Talar Fossian, Lara Nasreddine (Advisor), Complementary Feeding and Breastfeeding Practices in a Rural Community of Lebanon.
- Hoda Hadavi, Farah Naja (Advisor), Association between Dietary Patterns and the Risk of the Multiple Sclerosis among Tehranian Adults: A Case Control Study in Tehran, Iran.

Research Funding

Internal Grants

Seven members of the department received URB grants as below:

University Research Board (URB)

- Abiad, Mohamad. Release Kinetics of Volatile Organic Compounds Stored in Metal Organic Frameworks (MOF's) Made from Edible Ingredients.
- Ghattas, Hala. Development of A Tool Measure Food Insecurity In Children In Lebanon.
- Kassaify, Zeina. Food Safety Knowledge and Practices In Domestic Kitchens In Lebanon Associated With The Level Of Risk: Case Study.
- Naja, Farah. Association Between Insulin Resistance, Metabolic abnormalities and H. Pylori Infection Among Lebanese Adults.
- Nasreddine, Lara. Development and Validation of a Food Frequency Questionnaire for the Assessment of Sodium Dietary Intake in Lebanese Adults.
- Obeid, Omar. The assessment of urinary iodine status of children in Lebanon.
- Toufeili, Imad. Comparison of Some Selected Antioxidant Assays For Estimating Antioxidants Capacity Of Honey.

Local, Regional and International Grants

Six members of the department were successful in attracting national and international grants as below:

- Abiad, Mohammad. A Solar Energy Operated Brooder to Improve Food Security of Small-holder Poultry Farmers in Rural Lebanon. Grant from The Munib & Angela Masri Institute of Energy and Natural Resources.

- Ghattas, Hala. The role of dietary phosphorus in the development and progression of NAFLD in rats. Medical Resource Package.
- Kassaify, Zeina. Food Safety Knowledge, Attitudes and Practices of Food Handlers in SME's, Beirut, Lebanon: A Focus on Quantitative Risk Assessments of Pathogens in Ready-to-Eat Salad Vegetables. Lebanese National Council for Scientific Research.
- Obeid, Omar. Premeal Phosphorus Supplementation for Reducing Energy Intake and Body Weight. Lebanese National Council for Scientific Research.
- Obeid, Omar. Glycemic index of bread: fiber or minerals? This is the question. Medical Resource Package.
- Obeid, Omar. Innovation Voucher. Industrial Research Institute (IRI).
- Nasreddine, Lara. Coca-Cola: Evidence-Based Nutrition Intervention Program. Coca-Cola Foundation.
- Hwalla, Nahla. Grant Agreement – Healthy Kids Partnership. NESTLE MIDDLE EAST FZE.
- Hwalla, Nahla. Collaboration Agreement – Nestle Healthy Kids Global Programme. NESTLE MIDDLE EAST FZE.
- Hwalla, Nahla. Research Grant National Council for Scientific Research: Research Unit: Nutrition and Non-Communicable Disease in Lebanon.
- Hwalla, Nahla. Vegetables Seeds Trial at AREC II. UNIFERT.
- Hwalla, Nahla. Collaboration in the Seed Increase of International Nurseries. ICARDA.

Publications

Fourteen articles were published in international referred journals by the NFSC members as indicated below:

International Refereed Journals (Corresponding/Senior author *)

- Abiad, M.G. and Chalak, A.,* 2012. Unraveling Mean and Variance Heterogeneity Influences of Information Provision on Safer Food Purchasing Decisions: A Heteroscedastic Mixed Logit Approach. *Food Economics*. 9 (3): 135-144. doi:10.1080/2164828X.2013.781942.
- Barbour, E.K.,*, Saade, M.F., Sleiman, FT., Hamadeh, S.K., Mouneimne, Y., Kassaify, Z., Kayali, G., Harakeh, S., Jaber, L.S., and Shaib, H. (2012). Optimization of Saanen Sperm Genes Amplification: Evaluation of

Standardized Protocols in Genetically Uncharacterized Rural Goats Reared Under a Subtropical Environment. *Tropical Animal Health and Production*. 44:1513- 1519.

- Chalak, A., Reid, S., Silcock, M., and Abiad, M.,* 2013. Customers' Perspectives of Water Safety and Service Failure Risks. *Journal of American Water Works Association (JAWWA)*. 105 (8): E449-E459. doi:10.5942/jawwa.2013.105.0092.
- Chalak, A. and Abiad, M.G.,* 2012. How Effective is Information Provision in Shaping Food Safety Related Purchasing Decisions? Evidence from a choice experiment in Lebanon. *Food Quality and Preference*. 26: 81-92. doi:10.1016/foodqual.2012.04.00.
- El Mogharbel, O., Ghali, K., Ghaddar, N., and Abiad, M.G.,* 2013. Simulation of a Localized Heating System for Broiler Brooding to Improve Energy Performance. *International Journal of Energy Research*. doi:10.1002/er.3023.
- Ghattas, H.,* Barbour, JM., Nord, M., Zurayk, R., and Sahyoun, N.R. Household Food Security Is Associated with Agricultural Livelihoods and Diet Quality in a Marginalized Community of Rural Bedouins in Lebanon. *J Nutr*. 2013; doi:10.3945/jn.113.176388.
- Hlais, S., El-Bistami, D., El Rahi, B., Mattar, M., and Obeid, O.,. 2013. Combined Fish Oil and High Oleic Sunflower Oil Supplements Neutralize their Individual Effects on Lipid Profile of Healthy Men. *Lipids*. 48(9), 853-861.
- Isma'eel, H.,*, Harbieh, B., Tamim, H., Nasreddine, L., Naja F.,* Sibai, A., Adra, N., Badr, K., and Hwalla, N. (2013). Discrepancies Between Two Lipid-Lowering Guidelines for CVD prevention in Seemingly Healthy Individuals—Case Study Lebanon. *Cardiovascular Diagnosis and Therapy* doi: 10.3978/j.issn.2223-3652.2013.07.01.
- Kathuria, A., Abiad, M.G., and Auras, R.,* 2013. Deterioration of Metal Organic Framework Crystal Structure During Fabrication of Poly(L-lactic acid) Mixed Matrix Membranes. *Polymer International*. 62 (8): 1144-1151. doi:10.1002/pi.4478.
- Kassaify, Z.,*, Abi Khalil, P., and Sleiman, F. 2013. Quantification of Antibiotic Residues and Determination of Antimicrobial Resistance Profiles of Microorganisms Isolated From Raw Milk in Lebanon. *Food and Nutrition Sciences*. 4; 1-9.
- Obeid, O.* Low Phosphorus Status Might Contribute to the Onset of Obesity. *Obesity Reviews*. DOI: 10.1111/obr.12039.

- Naja, F.,* Hwalla, N.,* Itani, L., Salem, M., Azar, S.T., Zeidan, M.N., and Nasreddine, L.,*. 2012. Dietary Patterns and Odds of Type 2 Diabetes in Beirut, Lebanon: a case-Control Study. *Nutrition and Metabolism*. 9(1): 111.
- Naja, F.,* Nasreddine, L.,* Itani, L., Adra, N., Sibai, A.M., and Hwalla, N.,*2013. Association Between Dietary Patterns and the Risk of Metabolic Syndrome Among Lebanese Adults. *European Journal of Nutrition*, 52(1):97-105. doi: 10.1007/s00394-011-0291-3.
- Nasreddine, L.,* Zeidan, M.N., Naja, F.,* and Hwalla, N.,*2012. Complementary Feeding in the MENA Region: Practices and Challenges. *Nutrition, Metabolism, and Cardiovascular Diseases*, 22(10): 793-8.

Technical Reports and Policy Notes

- Olabi, A., Toufeili, I. 2013 Pomegranate Concentrate Study, Industry Technical Report.

Abstracts

- Ayaso, R., **Ghattas, H.**, Abiad, M., and **Obeid, O.** Meal patterns of Rats Maintained on Tryptophan and Lysine Supplemented Diet. *Obesity Facts* 2012; 5 (Suppl 1), 152.
- Akik, C., Safieddine, B., Ghattas, H., Knai, C., and Filteau, S. The Effectiveness of Interventions to Promote and Support Breastfeeding Initiation and Exclusivity in Health Services, By Abstract presented at: *Experimental Biology*. Boston, Massachusetts, USA. April 2013.
- Batal, M., Talhouk, S., Ousta, D., Ghattas, H., **Obeid, O.**, Olabi, A., Kassaify, Z., Chaaban, J. and Makhzoumi, J. An Ecohealth Approach to Nutritional and Environmental Problems in the 21st century: A Case-Study from Lebanon. By Abstract presented at: *The 2nd American Society for Nutrition Middle East Congress* (Nutrition in Health & Disease). Dubai, UAE February 20— 22, 2013.
- El Alami, N., Batal, M., and **Obeid, O.** Comparison of Pre-diabetes and Cardio Metabolic Risk Factors between Urban and Rural Adult Non-Diabetic Lebanese Population Samples. By Abstract presented at: *The 2nd American Society for Nutrition Middle East Congress* (Nutrition in Health & Disease). Dubai, UAE. February 20— 22, 2013.
- **Ghattas, H.**, Seyfert, K., and Sahyoun, N.R. Food Insecurity among Palestinian Refugees Living in Lebanon: a Household Survey. *The Lancet online*, 2012.
- Hazim, J., Shatila, D., Ghattas, H., Hlais, S., and **Obeid, O.** The Effect of High Fat Meal Containing Phosphorus on Postprandial Lipid Status of Healthy Subjects. By Abstract presented at: *The European Congress on Obesity*. Liverpool, UK, May 12—15, 2013.

- **Naja, F., Hwalla, N.**, Itani, L., Salem, M., Azar, S., Zeidan, M.N., and Nasreddine, L., “Dietary Patterns And Risk Of Type 2 Diabetes Mellitus In Lebanon: A Case-Control Study” *The 5th International Congress on Pre-diabetes and the Metabolic Syndrome*. Vienna, Austria, April 18—20, 2013.
- **Naja, F., Nasreddine, L., Hwalla, N.**, Moghames, P., Shoaib, H., Fatfat, M., Sibai, A., and Gali-Muhtasib, H. Association Of H. Pylori Infection With Insulin Resistance and Metabolic Syndrome Among Lebanese Adults. *The 5th International Congress on Pre-diabetes and the Metabolic Syndrome*. Vienna, Austria, April 18—20, 2013.
- Salti N, Nuwayri-Salti N, Ghattas H. Disability and Food Insufficiency among Palestinians in Lebanon. By Abstract presented at *The 4th Lancet Palestinian Health Alliance Conference*. Cairo, March, 2013.
- Sayegh, N., Sayegh, R., **Obeid, O.**, Track-Smayra, V., and Younes, H. Characteristics of Nonalcoholic Fatty Liver Disease Induced in Wistar Rats Following Four Different Diets. *Obesity Facts*, 2013; 6 (suppl 1) 89.

Posters

- Abiad, M., and Aboughali, K. Solar Energy Operated Brooder to Improve Food Security of Small-Holder Poultry Farmers in Rural Lebanon. Fourth Annual International Masri Institute Workshop on Energy and Natural Resources, AUB, Beirut, Lebanon, May 2013.
- Al-Bacha, S., Koleilat, L., Najjar, M., Sayyed Ahmad, R., and Abiad, M. Conserving Marine Biodiversity through an Innovative Recycling Solution for Waste Cooking Oil. Seventh Annual International Biodiversity Day at AUB (IBDAA), Beirut, Lebanon. April 2013.
- Atamian, S., Olabi, A. and I. Toufeili. The Characterization of the Physicochemical and Sensory Properties of Full-Fat, Reduced-Fat and Low-Fat Bovine, Caprine and Ovine Concentrated Yoghurt (Labneh). BY Poster presented at: the Institute of Food Technologists Annual Meeting, Chicago, July 13—16, 2013.
- Atamian, S., Olabi, A., Kebbe Baghdadi, O. and Toufeili, I. The Characterization of the Physicochemical and Sensory Properties of Full-Fat, Reduced-Fat, and Low-Fat Bovine, Caprine, and Ovine Concentrated Yogurt (Labneh). Presented at the Institute of Food Technologists Annual Meeting, Chicago, July 13—16, 2013.
- Batal, M., Ghattas, H., and Abou Ezze, R. A school feeding program based on the Eco-Health approach: A case study from rural Lebanon. Presented at *Experimental Biology*, Boston, April 2013.

- Batal, M., Talhouk, SN., Ousta, D., Ghattas, H., Obeid, O., Olabi, A., Kassaify, Z., Chaaban, J., and Makhzoumi, J. An ecohealth approach to Nutritional and Environmental Problems in the 21st century: A Case-Study from Lebanon. By Poster presented at: the 2nd American Society for Nutrition Middle East Congress (Nutrition in Health & Disease), Dubai, February 2013.
- El Labban, S., Olabi, A., Safadi, B. and M. Awad. The Effect of Roux-en-y Gastric Bypass and Sleeve Gastrectomy Surgery on Food Preferences, Dietary Intake and Gastrointestinal Symptoms in Post-Surgical Morbidly Obese Subjects. By Abstract to be presented as a poster at the Institute of Food Technologists Annual Meeting, Chicago, July 13–16, 2013.
- Francis, F. and Olabi, A. Sensory and Biochemical Evaluation of Chicory during Frozen Storage. By Abstract to be presented as a poster at the Institute of Food Technologists Annual Meeting, Chicago, July 13–16, 2013.
- Ghattas, H., Sahyoun, NR., Seyfert, K., and Sassine, AJ. Food Insecurity in Palestinian and Iraqi Refugees in Lebanon. Presented at Experimental Biology, Boston, April 2013.
- Hazim, J., Shatila, D., Ghattas, H., Hlais S, and Obeid O. The effect of High Fat Meal Containing Phosphorus on Postprandial Lipid Status of Healthy Subjects. By Abstract from the European Congress on Obesity, 2013.
- Kassaify, Z., Hamzeh, R., and Abiad, M. Extending the Shelf Life and Eliminating Salmonella spp. and E coli in Tahini-based Dressing Presented at the International Association for Food Protection Annual Conference. Charlotte North Carolina, USA. July 28–31, 2013.
- Naja, F. “Prevalence and Determinants of Complementary and Alternative Medicine (CAM) Use among Lebanese Type 2 Diabetic Patients” 17th LEA annual conference to be held in Beirut, Lebanon. November 16–17, 2012.
- Naja, F. Poster presentation, “Dietary Patterns And Risk Of Type 2 Diabetes Mellitus In Lebanon: A Case-Control Study” 5th International Congress on Pre-diabetes and the Metabolic Syndrome, April 18–20, 2013.
- Naja, F. Poster presentation, “Association Of H. Pylori Infection With Insulin Resistance And Metabolic Syndrome Among Lebanese Adults,” 5th International Congress on Pre-diabetes and the Metabolic Syndrome, April 18–20, 2013.
- Nasreddine L., Akl C and Hwalla N, Trends in breast cancer incidence rates in Lebanon: Role of the nutrition transition. International Breast Cancer and Nutrition (IBCN) Symposium. Purdue University, U.S., October 10–12, 2012.
- Srour, N., Olabi, A. and I. Toufeili. Developing a carob milk-based beverage

using different varieties of Lebanese carob pods and assessing its chemical and sensory properties. Presented as a poster (by A. Olabi) at the Institute of Food Technologists Annual Meeting, Chicago, July 13–16, 2013.

Services

Mohammad Abiad

AUB

- Advisor at the Student Representative Committee.
- Member of the Faculty Graduate Studies Committees.
- Member of the Faculty Undergraduate Admissions Committee.
- Member of the Steering Committee, Center for Food Security and Policy in the Middle East.
- Member of the Faculty Library Committee.
- FAFS representative in the Board of Graduate Studies.
- FAFS representative in the Teaching Excellence Award Committee.
- FAFS representative in the Writing Center Advisory Board.
- FAFS representative and member in the Career Service Task Force.
- Member of the Senate Admissions Committee.
- Member of the University Scholarship Program (USP – USAID) Selection Committee.
- Member and FAFS representative of K.A.S. Central Research Science Laboratory Steering Committee.
- Member and FAFS representative in the Interfaculty Financial Aid Committee.
- Chair of IBDA (Student Innovation Initiative) Organizing Committee.
- Member of the Unified University Admissions Committee.
- Member the Nature Conservation Center for Sustainable Futures

Others

- Reviewer for the following journals: Food and Bioprocess Technology, Foodborne Pathogens and Disease, Food Biophysics and Journal of Food Engineering Reviews.

- Reviewer for the following journals:
 - International Journal of Food Properties
 - Food and Bioprocess Technology
 - Foodborne Pathogens and Disease
 - Food Biophysics
 - Journal of Food Engineering Reviews
- Reviewer (abstracts and proceedings) for the following conferences and meetings:
 - AAPS (The American Association of Pharmaceutical Scientists) National Biotechnology Conference 2013
 - AAPS Annual Meeting 2013

Hala Ghattas

AUB

- Member of the Joint FAFS-FHS Committee on the development of a Master's in Public Health Nutrition.
- Member of the FAFS Graduate studies committee.
- Member of the FAFS Library committee.
- Member of the Program Review Committee for the Department of Nutrition and Food Sciences.
- Organizer of the Annual AUB Wellness Committee Fit-a-thon Nutrition booths.

Nahla Hwalla

Others

- Fellow of International Union for Nutritional Sciences (FIUNS).
- Member of the WHO Expert Advisory Panel on Nutrition.
- Member of the American Society for Nutrition.
- Member of the Middle East and North African Nutrition Association.
- Member of the Federation of Asian Nutrition Societies.
- Member of the WHO Nutrition Guidance Expert Advisory Group (NUGAG) Sub group on Diet and Health.
- Member of the Columbus Concept Scientific Advisory Board.
- American Dietetic Overseas Association Country Representative for Lebanon.

- Council member of World Public Health Nutrition Association.
- Member of Academic Review Board - Middle East, International Quality Education Foundation (IQEF).
- Editorial board member: Mediterranean Journal of Nutrition and Metabolism.
- Editorial board member: International Journal of Food Sciences and Nutrition.
- Editorial board member: Annals of Nutrition and Metabolism.
- Editorial board member: Health Education Research.
- Reviewer of Research Articles:
 - World Health Organization Bulletin
 - Nutrition Research
 - European Journal of Clinical Nutrition
- Reviewer of research articles in Lebanese Science Bulletin

Zeina Kassaify

AUB

- Chairperson, Nutrition and Food Science Department.
- Chair, Clinical and Sports Nutrition position search committee.
- Member, Nutrition and Food Science- - Coordinated Program (CP) Committee to meet ACEND accreditation standards.
- Member/Co-Chair, Nutrition and Food Science- Program Review.
- Sought and led the development of the Culinary workshop at the Nutrition and Food Science Department.
- Develop and organize the Food Safety certification, ServSafe, offered by the National Restaurant Association Educational Foundation- USA to graduating students twice a year.
- Advisor, Food Science Society.
- Member, Steering Committee for the Development of the Doctoral Veterinary Medicine (DVM) Degree Program jointly with the Faculty of Medicine.
- Chairperson of the FAFS Student Affairs Committee.
- Member, Administrative Committee.
- Member of the FAFS Academic and Curriculum Committee.

- Member of the FAFS Graduate Studies Committee.
- Member of the Interfaculty Committee for Capacity Building in Food Security.
- Member of the Food Service Committee.
- Member of the Periodic Review Report Committee.
- Faculty Representative, Capital Budget Committee.
- Faculty Representative of the University Committee on Student Affairs.
- Faculty Representative of the Senate Academic Development Committee.
- Faculty Representative of the University Graduate Studies Board, AUB.
- Member of the University Student Faculty Committee.
- Member of the IBSAR Research Committee.

Others

- Affiliate Executive Officer and Delegate, International Association for Food Protection (IAFP).
- President of the Lebanese Association for Food Safety.
- Member of IBSAR (Center for Nature Conservation and Sustainable Futures).
- Member of the Ministry of Agriculture Committee for fresh and frozen meats and poultry
- Member of UNIDO Food Safety Panel for Food Safety Law.
- Reviewed for the CNRS, Lebanon.
- Reviewed for the Journal of Science of the Total Environment (STOTEN).
- Reviewer for the WHO Eastern Mediterranean Health Journal.
- Reviewer for the Nutrition and Metabolic Insights.
- Reviewer for University Research Board, American University of Beirut.

Farah Naja

AUB

- Member of FAFS Research Committee.
- Member of FAFS Academic and Curriculum Committee.
- Member of the AUB Wellness Committee.
- Member of the Vascular Medicine Program.

- Member of the Population Health and Nutrition Study group (PHANS).
- Member of the Food Security and Policy in the Middle-East (FSPME).

Others

- Examination Member of National Nutrition Colloquium.
- Reviewed four articles for the three journals.
- Member of the International Breast Cancer Network.

Lara Nasreddine

AUB

- Coordinator of the Nutrition and Dietetics Undergraduate Program, FAFS.
- Member of the FAFS Academic and Curriculum Committee.
- Member of FAFS Students Affairs Committee.
- Member of the University Senate.
- Member of the Senate Steering Committee.
- Full member of the Social and Behavioral Institutional Review Board (IRB).
- Member of the Biomedical Sciences PhD Committee.
- Member of the Vascular Medicine Program (VMP) Executive Council.
- Member of the Population Health and Nutrition Study group (PHANS).
- Member of the Food Security and Policy in the Middle-East (FSPME).

Others

- Board Member of the National Nutrition Colloquium examining committee (since June 2006).
- Reviewer for one article for the Journal of Nutrition and education Behavior and one article for Annals of Human Biology
- Participation as guest speaker in courses given at FAFS:
 - Agriculture 201 (Lecture on Public Health Nutrition) April 17, 2013
 - Agriculture 295 (Lecture on Dietary Exposure of Lebanese Adults to Pesticide Residues :A Total Diet Study Approach) April 16, 2013.

Omar Obeid

Others

- Appointed as National Coordinator for ICCIDD Global Network for Lebanon June 2013.

- Full member of The Nutrition Society, UK.
- Member at The Lebanese Association for Nutrition and Food Science (Executive Committee).
- Member of the Advisory Committee for the Arab center of Nutrition.
- Member of the editorial board: Arab Journal of Food and Nutrition.
- Member of MENANA (Middle East and North Africa Nutrition Association).
- Member of Evaluation Committee (Ministry of Education).
- Member of the Nutrition in Emergencies Training Network (NIETN).
- Member of the Editorial Advisory Board,(Canadian Journal of Clinical Nutrition).
- Member of the Editorial Board,(ISRN Nutrition).

Reviewer

- Eastern Mediterranean Health Journal (EMHJ)
- Journal of Biological Sciences.
- Book:Nutrition and Cancer (King Saud University) 2012

Ammar Olabi

AUB

- Member of the FSMT Accreditation Committee.
- Chair of NFSC Program Review Committee.
- Member of the Search Committee for the Director of the Office of International Programs.
- Member of Ad-Hoc Committee for crafting a proposal for Public Health Nutrition Graduate Program.
- Member of Ad-Hoc Committee for Food Science & Management Junior Internship.
- Member of the Ad-Hoc Committee for Double Major in the NFSC department.
- Member of the Nutrition and Dietetics-Coordinated Program Departmental Accreditation Ad-Hoc.
- Member of the Second Tenure Task Force FAFS Representative.
- Member of the Food Security and Policy in the Middle East Program.

- Member of IBSAR (Nature Conservation Center for Sustainable Futures).
- Member of the Lebanon Action for Salt and Health Group (LASH).

Others

- Member of the Committee for milk and milk products at the Ministry of Agriculture.
- Member of the Agro Industry Committee at the Ministry of Agriculture.
- Member of the National Codex Alimentarius Committee.
- Member of the World Action on Salt & Health (WASH).
- Member of the Institute of Food Technologists (Sensory and Quality Assurance divisions).
- Member of the American Dairy Science Association.

Reviewer

- Journal of Food Science
- Journal of Dairy Science

Imad Toufeili

AUB

- Member of FAFS Advisory Committee.
- Member of FAFS Graduate Studies Committee.
- Member of University Commencement Committee.
- Member of the University Publications Committee.
- Coordinator of Graduate Studies.
- Member of the Advisory Committee of the Center on Teaching and Learning.
- Member of the organizing Committee and FAFS representative on AUB Open House Graduate Day.
- Member of the University Ad hoc Committee on Graduate Assistantships.

Reviewer

- African Journal of Agricultural Research
- Journal of Food Processing & Preservation

Participation in Workshops and Conferences

Hala Ghattas

- Attended and presented a seminar on “Food insecurity and Nutritional Status of Children” at the AUB-LANFS conference on “Ensuring a Healthy Start for the Pediatric Population,” Beirut, December 2012.

Mohammad Abiad

- Attended a webinar Rheological Fingerprinting of Complex Fluids and Soft Solids using LAOS (Large Amplitude Oscillatory Shear), organized by TA Instruments ,New Castle, DE, delivered by Prof. Gareth H. McKinley, Massachusetts Institute of Technology. September 2013.
- Developed a 6-day workshop on Organic Fresh Produce Packaging in Ajloun Governorate, Jordan at Al Kifah Cooperative Society. The workshop was funded United States Agency for International Development (USAID) and ACDI/VOCA, Farmer-to-Farmer program. Amman, Jordan. May 2013.
- Co-instructed along with Dr. Ghassan Chehab, Civil and Environmental Engineering Department, Faculty of Architecture and Engineering at AUB a workshop on construction materials for for Dar Al-Handasah, The workshop was attended by 10 engineers as well as management personnel from the Geotechnical and Heavy Civil Engineering Department. Beirut, Lebanon. April 2013.
- Organized a 4-day seminar series on Food Packaging in collaboration with the United States Agency for International Development (USAID) and ACDI/VOCA, Farmer-to-Farmer program. March 2013.

Nahla Hwalla

- Presented EMR Nutrition Strategy to the Bel Group Expert Committee, Paris, France, October 30, 2012.
- Attended and presented a lecture on : Early Nutrition and Adult Non-Communicable Disease at the Ensuring a Healthy Start for the Pediatric Population Conference. , AUB, Beirut, Lebanon. December 7, 2012.
- Attended and presented a lecture on: Breastfeeding & Complementary Feeding Practices in Lebanon and the Project Design Meeting for Two Regional Projects
- (International Atomic Energy Agency), Vienna Austria December 17–20, 2012.

- Attended food security conference in Paris 2012 and presented a lecture entitled “Food Security and Policy Education (FSPEP)”.
- Attended and presented two lectures on: Getting the Monitoring Right and the Scientific Expertise in the Healthy Kids Programme, and “Associated Research Unit (ARU) on Undernutrition and Obesity in Lebanon at the Nestle Healthy Kids Global Workshop ,New Delhi, India. November 6–7, 2012.
- Attended and presented abstract on: Probiotics and Obesity at the International Conference and exhibition on Probiotics San Antonio, Texas, USA. November 19–21, 2012. a”
- Attended and presented lecture on: Developing Food-Based Dietary Guidelines at the Technical Workshop for Setting National Food-Based Dietary Guidelines for Qatar. January 6–7, 2013.”
- Attended and presented a poster on: Infant Feeding Practices and Challenges: A Pilot Study in Lebanon a Experimental Biology 2013 , Boston, Massachusetts, USA. April 20–24, 2013.
- Invited to attend and present lecture on: Dietary Fiber and Diabetes management and gave workshop on Dietary Reference Standards: Uses & Abuses at the
- 9th Diabetic Diet Course, King Saud University Riyadh, KSA. May 13, 2013.
- Invited to attend the Group President Sustainability Awards Ceremony organized by Coca-Cola Eurasia and Africa Group, Turkey. May 28, 2013.

Zeina Kassaify

- Attended a series of 4- days seminars on Food Packaging organized by the Department of Nutrition and Food Sciences at the American University of Beirut in collaboration with the United States Agency for International Development (USAID) and ACDI/VOCA, Farmer-to-Farmer program, AUB. March 18–21, 2013.
- Presented “An ecohealth approach to nutritional and environmental problems in the 21st century: a case-study from Lebanon,” at the 2nd American Society for Nutrition Middle East Congress (Nutrition in Health & Disease). February 20– 22, 2013. Dubai, UAE.
- One day workshop entitled “Food Safety in the dairy Industry,” given to the cooperative women of Aarsal. January 2013.
- Moderator at the Symposium on Career Trends and Opportunities in Agriculture, Nutrition and Landscape Design, FAFS, AUB. November 16 2012.

Farah Naja

- Presented a paper on: the Association of culture specific dietary patterns with non-communicable diseases in a population undergoing Nutrition Transition Participated in the 3rd International Symposium and think tank on Breast Cancer Prevention. International Breast Cancer Network (IBCN). Purdue, USA. October 2012.

Lara Nasreddine

- Guest speaker at the Heart Attack Prevention Workshop on “Be Salt Aware.”.University for Seniors, American University of Beirut, May 10, 2013 and May 22, 2013.
- Attended and presented a lecture on the Non-Communicable Diseases (NCDs): Risk Factors, Prevention and Control-Translating Evidence into Practice and on “Diet and Physical Inactivity as NCD Risk factors in Lebanon,” Notre Dame University (NDU), Faculty of Nursing and Health Sciences, Lebanon, May 14–15, 2013.
- Attended and presented at the Clinical Research Institute Seminar Series as an invited speaker and gave a presentation on “Nutrition as a Vehicle for Cardiovascular Translational ResearchA Paradigm shift from individual to group research at AUB: The Vascular Medicine Program (VMP) as a case study. American University of Beirut, Lebanon, May 15, 2013.
- Attended and presented at the 2nd Middle East Congress of the American Society for Nutrition (ASN), Nutrition in Health and Disease as an invited speaker and gave a presentation on “Diabetes in the Middle East,” Dubai , UAE, 21 February 2013.
- Participated in the Project Design meeting for two IAEA regional projects (2014–2015) in nutrition (RAS/0063/9008/01): IAEA headquarters, Vienna, Austria. December 16–20, 2012.
- Attended and presented at the Conference on “Ensuring a Healthy Start for the Pediatric Population,” and gave a presentation as an invited speaker on the Prenatal Origin of Obesity and NCDs: The Role of Maternal Overnutrition, American University of Beirut, Lebanon, December 7, 2012.
- Attended the 17th Lebanese Epidemiology Association (LEA) Annual Conference and gave a presentation on “Dietary Intake of Salt among Lebanese Adults. ” Gefinor Rotana Hotel, Beirut, Lebanon.— November, 16–17, 2012.
- Attended the 10th International Congress on Cardiology and Cardiac Survey (organized by the American College of Cardiology, Cleveland Clinic,

European Society of Cardiology) and gave a presentation on “Salt Intake in the Lebanese Community: Sources, knowledge, attitudes and habits.” Phoenicia Intercontinental Hotel, Beirut, Lebanon. K October, 17–20 2012.

- Participated in the International Breast Cancer and Nutrition (IBCN) Symposium through a poster on “Trends in breast cancer incidence rates in Lebanon: role of the nutrition transition.” (Nasreddine L., Akl C and Hwalla N). Purdue University, U.S. October 10–12, 2012.

Omar Obeid

- Presented a lecture entitled: The role of Micronutrients in health and disease at Dr Sulaiman Al-Habib Medical group, 3rd GCC symposium of HMG in Clinical Nutrition. Bahrain. April 10–11, 2013.
- Invited by Dr Sulaiman Al-Habib Medical group, 3rd GCC symposium of HMG in Clinical Nutrition (10–11 April 2013) Bahrain to present a lecture entitled: The role of Micronutrients in health and disease. Oman. March 18–19, 2013.
- Presented a lecture entitled: Early nutritional programming of long term health at the Arab Center for Nutrition and Nahda Hospital. Oman. March 18–19, 2013.
- Presented a lecture entitled: Nutrition and programming: the case of folate at “Ensuring a healthy start for the Pediatric population Organized by The Department of Nutrition and Food science and The Lebanese Association for Nutrition and Food Science (LANFS). Beirut, Lebanon. December 7, 2012.

Ammar Olabi

- Presented four posters at the annual meeting of the Institute of Food Technologists. Chicago, USA, July 13–16, 2013.
- Participated in a two-day course on the sensory evaluation software, Compusense. Chicago, USA, July 11–12, 2013.
- Attended the conference on “Ensuring a Healthy Start for the Pediatric Population,” by the NFSC Department and the Lebanese Association for Nutrition and Food Sciences December 7, 2012.
- Attended the FAFS Career Symposium, November 16, 2012.

Consultancies

Hala Ghattas

- International Medical Corps, Lebanon and Jordan: Nutrition in Emergencies training for health and nutrition care providers for Syrian refugees in Jordan. December 2012.

Zeina Kassaify

- Several reports on the microbiological analysis of various samples provided by Roadster Diner. March, April, July 2013.
- Report on the safety and microbiological analyses of prepared items for Sukleen S.A.L February 2013.
- Report on the microbiological analysis of food samples provided by Goodies. June, 2013
- Report requested by the judicial body, Lebanon, on the safety and the interpretation of the microbiological analyses of confiscated wheat flour stocks. January 29, 2013.
- Fahad Bin Sultan University Project, Development of a Nutrition and Dietetics Program (November—December 2012).
- Report on the microbiological analysis of water and food samples provided by Falamki. November, 2012.

Lara Nasreddine

- Fahad Bin Sultan University Project, Participation in the Development of a Nutrition and Dietetics Program (December 2012)

Ammar Olabi

- Consultancy with McKinsey (Dubai) for Qatar National Food Security Program, May 26—29, 2013, Doha, Qatar.
- Development of condiments using pomegranate concentrate. March 16, 2012—January, 2013.

Junior Paid Research Leave

Hala Ghattas

- Junior Paid Research Leave for the spring semester 2013.

Media appearances

Zeina Kassaify

- An interview about the food safety situation in Lebanon on EtEjah TV, March, 2013.
- An interview about the food safety situation in Lebanon on “The Drs.” MTV, March, 2013.
- An Article about Food safety workshop with the NGO Sanabel Al Nour, Tripoli. Al Tamadon. February, 2013.
- An Article about Food safety workshop with the NGO Sanabel Al Nour, Tripoli. Al Bayan. February, 2013.
- An interview about the food safety situation in Lebanon on “Akhbar l Saba7” Future TV, November, 2012.
- An interview about the food safety situation in Lebanon on “Al-Fassad” NEW TV, October, 2012.

Lara Nasreddine

- Website story : New AUB study: Staple Lebanese breakfast foods high in salt (<http://www.aub.edu.lb/news/2013/Pages/salt-aubmc.aspx>)
- Salt intake amongst the adult Lebanese population and main contributors to intake:
- Interview with Voix du Liban (Lebanon)
- Interview with the Daily Star (Lebanon)
- Interview with the Magazine (Lebanon)
- Diabetes in the Middle-East
- Interview with Health and Nutrition, Alghithaa El Sohi volume 152, April 2013. (Dubai).
- Interview with Al-Dunia (volume 83, May 2013) (Dubai).
- Interview with Physique magazine (Dubai).

Certificates

Zeina Kassaify

- ServSafe for Food Safety.

Awards

Hala Ghattas

- Winner of the *Innovative Biomedical Research Award* (2013—14).

Omar Obeid

- Winner of the *Innovative Biomedical Research Award* (2013—14).
- Winner of an *Innovation Voucher*. (2013). Centre for Innovation & Technology, Industrial Research Institute, Lebanon.

Strategic Challenges

- Reviewing the curricula of FSMT to seek accreditation.
- The department is taking measures to increase its visibility and outreach activities to the for the food industry. Develop new courses as part of the new proposed degrees.
- The department has witnessed over this year major administrative activities that have required the contribution of a significant proportion of its faculty members such as the finalization and submission of the self-study to the Accreditation Council for Education in Nutrition and Dietetics (ACEND), the preparation and completion of the self-study for the Departmental Program Review, the restructuring of the Food Science and Management Junior Summer Internship, the preparation of a draft proposal for a graduate degree in Public Health Nutrition, etc. All of these activities, although only conducted every few years, have sometimes taken away several faculty members from their focus on research activities.

Future Plans

- Align the Departmental vision with that of the strategic vision of FAFS and mainly be involved in the Food security initiative and the new proposed degrees.
- As packaging in the region lacks technical support and expertise, establishing a Packaging and Consumer Unit for Research and Education (Pack CURE) at the Faculty of Agriculture and Food Sciences that will host outreach activities like joint training, conferences and workshops on issues related to food safety, food packaging, food traceability and consumer perception research or any other related topics is essential. The unit will be dedicated to establishing packaging courses and workshops to serve the Lebanese industry and the MENA region.

- Sustain research and supervision of current projects. Write new collaborative project proposals for funding.

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