

FACULTY OF AGRICULTURAL AND  
FOOD SCIENCES

# ANNUAL REPORT



2014-2015





# TABLE OF CONTENTS

Preface .....	5
I. Office of the Dean .....	7
A. Non-Academic Personnel .....	8
B. Standing Committees .....	8
The Administrative Committee .....	8
The Advisory Committee .....	10
The Academic and Curriculum Studies Committee .....	11
The Undergraduate Admissions Committee .....	12
The Graduate Studies Committee .....	13
The Research Committee .....	15
The Student Affairs Committee .....	18
II. The Faculty .....	20
A. Academic Matters .....	21
Faculty Recruitment and Count .....	21
Faculty Affairs .....	21
Research Grants and Service Contracts .....	22
Accreditation, Program Reviews and New Programs .....	22
Recognition .....	23
Faculty Meetings .....	23
Recommendations from Special Faculty Meetings .....	24
B. Student Statistics .....	25
C. Centers and Units .....	34
a. Agricultural Research and Education Center (AREC) .....	34
b. Environment and Sustainable Development Unit (ESDU) .....	40
III. Departmental Reports .....	42
A. Department of Agriculture .....	43
Highlights .....	43
Personnel .....	44
Teaching Activities .....	48
Completed Theses .....	53
Research Funding .....	53
Publications .....	54

Services .....	58
Participation in Workshops, Meetings and Conferences .....	62
Consultancies .....	64
Strategic Challenges .....	64
<b>B. Department of Landscape Design &amp; Ecosystem Management .....</b>	<b>65</b>
Highlights .....	65
Personnel .....	74
Teaching .....	79
Completed Theses and Thesis Advising .....	82
Research Funding .....	83
Local, Regional and International Grants .....	85
Publications .....	86
Services .....	89
Participation in Workshops and Conferences .....	93
Consultancies .....	96
Strategic Challenges .....	96
<b>C. Department of Nutrition and Food Sciences .....</b>	<b>98</b>
Highlights .....	98
Personnel .....	100
Teaching .....	105
Completed Theses .....	110
Research Funding .....	111
Publications .....	111
Services .....	112
Participation in Workshops and Conferences .....	116
Consultancies .....	119
Strategic Challenges .....	120

## PREFACE



Dear All,

It is always a pleasure to share with you the Faculty of Agricultural and Food Sciences (FAFS) Annual Report as it allows me to reflect back on the year's achievements and share with you highlights of yet another remarkable year.

The academic year 2014-2015 started on a positive note, whereby FAFS celebrated the ACEND (Accreditation Council for Education in Nutrition and Dietetics) accreditation of its Nutrition and Dietetics Coordinated Program (NDCP) with a Gala dinner, and where prominent FAFS alumnus, Mr. Raymond Debbane (BS 75), President and CEO of INVUS Group, was the guest of honor and keynote speaker. We kept up this

momentum throughout the year as we continued to make significant contributions to the Faculty's strategic initiatives in alignment with our mission and global themes along with our aspiration for *"Healthy Earth, Healthy Food, Healthy People"*.

Prominent achievements in research were upheld by FAFS faculty members' commitment to excellence and leadership in their fields. This is reflected in the sustained level of scholarly output, the secured extramural and intramural funding, the many presentations in local, regional and international conferences, and the hosting of workshops, seminars and symposia, such as: 1. the fourth Mediterranean Poultry Summit in collaboration with the World Poultry Science Association (Lebanon) and CNRS; 2. a joint workshop with the Lebanese Ministry of Agriculture to promote the implementation of Conservation Agriculture throughout Lebanon; 3. a symposium on "Nutrition and Exercise for Health: Emerging Updates," in collaboration with the Lebanese Academy for Nutrition and Dietetics; and 4. a symposium to discuss the AFED 2014 annual report on the topic of «Food Security: Challenges and Prospects», organized jointly by FAFS's Food Security Program and the Issam Fares Institute. Moreover, several faculty members received recognition and awards for their noteworthy contributions to advances in scientific research, namely, Dr. Isam Bashour who received the Milano Expo 2015 Award under the category "Feed the Planet" for his project on Conservation Agriculture; Dr. Nadim Farajalla who was awarded the Texas Christian University 'Global Innovator Award' based on his work on issues related to water, the environment, and ecosystem management; and Dr. Lara Nasreddine who received the 2014 Abdul Hamid Shoman Award for Arab Researchers, sharing it with another researcher from King Saud University,

KSA, under the section 'Health and Medical Sciences' for the theme "Healthy Nutrition, including dieting and obesity".

Accomplishments in support of FAFS's quality education initiative included an external academic review of the LDEM department's Bachelor of Landscape Architecture (BLA) program, and the revision of the Department of Agriculture's BS in Agriculture Program which is expected to become operational in 2016/2017.

The Faculty also moved forward on its Food Security initiative by securing the Lebanese Ministry of Education's registration for its new graduate program in Food Security scheduled for fall 2016-2017, and launching a Diploma in Food Security. In addition, the Faculty was active on several food security related initiatives such as participation in the Exceed Meeting and Annual Planning Workshop hosted by the Food Security Center at the Universität Hohenheim in Stuttgart, Germany, and leading efforts to secure AUB's engagement under the PUSH Initiative (Presidents United to Solve Hunger).

As regards to Finance, FAFS made a progress this year, whereby the Faculty's net contribution to AUB, excluding AREC, increased by 6% compared to last year. AREC, under the new leadership of Dr. Mustapha Haidar, was successful in reducing its deficit by US\$ 0.1M and renewed its research collaborations with ICARDA and UNIFERT, as well.

This year marked another good year for the Faculty. With this brief introduction, I would like to thank the entire faculty, staff and students for their dedication and hard work that culminated in another successful year. I would also like to thank our friends and alumni as none of this would have been possible without their continued support.

Nahla Hwalla  
Dean

## II. OFFICE OF THE DEAN

## A. NON-ACADEMIC PERSONNEL

Nine non-academic employees serve at the Dean's office as per table1 below:

Table 1: Non-Academic Personnel

Names	Title
Al Ashi, Dania	System Administrator
Charbaji, Suzanne	Assistant to the Dean (until June 2015)
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	Administrative Assistant
Zeidan, Maya	Program Review and Accreditation Officer

## B. STANDING COMMITTEES

### The Administrative Committee

Prepared by Wafa Khoury, Executive Officer

#### Membership

Nahla Hwalla, Chairperson  
Salma Talhouk, Associate Dean  
Mustapha Haidar  
Shady Hamadeh  
Lara Nasreddine  
Rami Zurayk



## Actions

The committee held 22 meetings throughout 2014-2015, and acted on the following:

### 1. Capital Budget

The committee members approved priority requests submitted by FAFS departments and AREC for the capital budget 2015-2016.

### 2. Graduate Assistants

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

### 3. Space

Dr. Y. Abunnasr presented to the committee members the results of a new space study needs at FAFS. The study was conducted to revise current and anticipated space needs of various departments and new programs developed at FAFS. Dr. Abunnasr also presented the greenhouse master plan that he developed.

### 4. URB Grant Review System

Mrs. Dania Al Ashi, FAFS IT System Administrator, presented to the committee members the URB review process that was automated. The process involves a screening part, a technical review, and a proposal for ranking part.

### 5. Faculty Workload Policy and Calculation Criteria

Dr. Maya Zeidan, FAFS Accreditation and Program Review Officer, presented to the committee members, for their review and further discussion, the methods for computing faculty teaching workload, including laboratory, studio, tutorial, internship and thesis. The methods used are based on data compiled from different USA universities.

### 6. Presentation on Students Feedback on Faculty Advising.

Dr. Mohamad Farran, Coordinator of Undergraduate Studies program at FAFS, presented to the committee members the results pertinent to FAFS of the advising evaluation survey conducted by OIR for their review and further discussion to improve the Faculty Advising at FAFS.

### 7. AREC

Security situation at the neighborhood of AREC and its implication on the students' residency at AREC during the spring semester 2015 was discussed in several meetings. It was recommended to proceed with the student residency at AREC for the spring semester 2015 on March 1, 2015. With the resignation of Mr. Hilal Dbouk as AREC Director, Dr. M. Haidar was appointed first as Acting Director effective November 2014, and then appointed as AREC Director as of July 1, 2015.

## The Advisory Committee

Prepared by Wafa Khoury, Executive Officer

### Membership

Nahla Hwalla, Chairperson

Youssef Abou Jawdeh

Nadim Farajalla

Mostapha Haidar

Ammar Olabi

Omar Obeid

Rami Zurayk

### Actions

The committee held twenty-one meetings throughout the period from September 1, 2014 to August 31, 2015, and acted on the following:

#### 1. Faculty Research Leave

Applications for sixteen short term faculty development grants were approved, in addition to the approval of two junior faculty research leaves, three periodic paid research leaves, and fourty-nine special leaves with pay.

#### 2. New Appointments

- The committee recommended the recruitment of three full-time faculty members for the academic year 2015-2016:  
One Visiting Assistant Professor in Horticultue at the AGRI department, and one Assistant Professor in Community Rural Development, and one Associate Professor in the NFSC department
- The committee recommended the recruitment of part-time faculty member, and approved the following appointments: 12 in the NFSC department; 25 in the LDEM department, 18 in the AGRI department and two for the RCODE program
- The committee approved the appointment of Shady Hamadeh as chairperson of the AGRI department for a period of three years as of September 1, 2015.

#### 3. URB Visiting Scholars

The committee approved a departmental recommendation to invite Dr. Pere Sala and Joseph Zimmerman as, URB Visiting Scholar at the LDEM/AGRI department and NFSC department for a period of one week in Spring 2015, respectively.

## Academic and Curriculum Studies Committee

Prepared by Ms. Rabia Koubayssi, Assistant for Student Services

### Membership

Nahla Hwalla, Chairperson

Mohamad Farran, Coordinator of Undergraduate Studies

Shady Hamadeh

Lara Nasreddine

Ammar Olabi

Adib Saad

Maria Gabriella Trovato

Rami Zurayk

Registrar's Representative

Student Representative

Rabia Koubayssi, Secretary

### Actions

Several committee meetings were held during the academic year 2014-2015, and the following actions were taken:

#### 1. Course Offerings and Introduction of New Courses

The committee reviewed and approved the lists of course offerings submitted by the respective departments for spring, summer, and fall. Also, the committee approved the following new Food Security Diploma courses:

- FSEC 300 "Food Security: Challenges and Contemporary Debate" (3 cr.).
- FSEC 315 "Food Policies and their Planning Process" (3 cr.).
- FSEC 305 "Agriculture; Technology, Supply Chains, Sustainability" (3 cr.)
- FSEC 310 "Nutrition Security: Assessment and Intervention Strategies" (3 cr.).
- FSEC 320 "Graduate Seminar in Food Security" (0 cr.).

#### 2. Eligible Students to Enroll in AREC

Twenty one students from the Agriculture program were deemed eligible by the ACC to enroll in AREC during the spring semester of 2014-15; classes started on March 2, 2015 as scheduled.

#### 3. New Agriculture Program

The committee approved the new revised Agriculture program to start effective fall 2015-16. The new proposed program maintains the 128 cr. requirement for graduation, as well as the spring and summer residency during the third year at AREC. A short summer internship was also introduced in the new program. The program fulfills the University's liberal art education

requirements while offering more flexibility in courses with two options of specialization: sustainable agriculture (organic/conservation) and agriculture technology, in addition to a free elective course in FAFS.

#### 4. Academic Status

Based on AUB probation rules and regulations, the committee acted to drop five students during the academic year 2014-15. Eight students were placed on strict probation, whereas seven were removed from probation.

#### 5. New B.Sc. in Food Science and Technology (FSTC)

The committee approved the new B.Sc. in Food Science and Technology (FSTC). Consequently, the NFSC department will house two undergraduate track programs in Food Science: 1) the existing Food Science and Management (FSMT) which integrates the principles of food science and managerial approaches, and 2) the new B.Sc. in Food Science and Technology (FSTC) which conforms with the requirements of the Institute of Food Technologies (IFT). The FSTC will be a three-year program that includes six semesters in addition to a summer term during the second year with a total of 107 credits. The first year will be common for both FSMT and FSTC. Students interested in FSTC may transfer internally at the end of the spring semester of their sophomore year.

#### 6. Awarding BS Degrees

The committee recommended to the Faculty to award BS degrees to 117 students distributed as follows: 28 in Nutrition and Dietetics, 14 in Nutrition and Dietetics – Coordinated Program, 17 in Food Science and Management, 21 in Landscape Architecture and Diploma of Ingenieur Agricole, 19 in Agriculture and Diploma of Ingenieur Agricole, and 18 in Agribusiness.

## The Undergraduate Admissions Committee

Prepared by: Ms. Tharwat Haddad, Student Records Officer

### Membership

Nahla Hwalla, Chairperson

Mohamad Abiad (Faculty representative on Unified University Admissions Committee)

Mohammad Farran

Hadi Jaafar

Lamis Jomaa

Salma Talhouk

Admission's Representative

Registrar's Representative

Student Representative

Tharwat Haddad, Secretary

## Actions

The committee held two meetings during the academic year 2014-2015, and acted on the following:

### 1. Acceptance of Transfer Students

The committee accepted a total of 154 transfer students from within AUB as well as from other universities:

- During the spring semester 2014-2015, a total of fifty-one transfer students were accepted, twenty-one of which have registered.
- In the fall semester 2015-2016, a total of ninety-three transfer students were accepted, twenty-nine of which have registered.

### 2. Enrollment Target and Strategy

The committee approved by vote the departmental chairs' recommendations on composite scores and enrollment targets for the academic year 2015-2016:

Names	AGRI	AGBU	LDEM	FSMT	NTDT
Number of new incoming undergraduate students departments can accommodate	40	40	25	30	30
Number of transfers (from within AUB and from outside AUB)	15	10	5	20	20
Total number of new and transfer students departments can accommodate during the Fall and Spring of 2015-16	55	50	30	50	50
Minimum cumulative average for transfer students	70	75	80	75	80
Minimum cut-off composite score for the Fall 2015-2016	520	525	540	520	540

## The Graduate Studies Committee

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

### Membership

Nahla Hwalla (Chairperson)

Mohamad Abiad

Elie Barbour

Hadi Jaafar

Farah Naja

Isam Bashour (Coordinator for Graduate Studies)

Maria Gabriella Trovato

Admission's Representative

Registrar's Representative

Student Representative

Rabia Koubayssi (Secretary)

## Actions

The committee met eight times during the academic year 2014-2015, and acted on the following:

### 1. Program of Study and Thesis Titles

The committee reviewed and approved the program of study and thesis titles for twenty-one students distributed as follows: 6 from NUTR, 8 from FTCH, 2 from ECOM, 2 from ANML, 1 from POSC, and 2 from PLPT.

### 2. Acceptance of Graduate Students

The committee accepted fifty students out of ninety-two applicants. Nineteen accepted students enrolled as follows: 6 Nutrition; 2 Food Technology; 1 Ecosystem Management; 1 Plant Protection; 1 Irrigation; 1 Agricultural Economics; 4 Poultry Science; and 3 Rural Community Development.

### 3. Petitions

The committee acted on twelve students' petitions, the majority of which were: extending residency; changing status from prospective graduate to regular graduate; extending incomplete grade; transferring from one major to the other; considering a graduate application; withdrawing from a course; transferring of courses; and exempting from a course.

### 4. New Elective Graduate Course in AVSC

The committee approved the new elective graduate course core, Pathological Mechanisms of Disease: Food, Nutrition and Pathology (AVSC 325) to be offered by the AGSC department.

### 5. New Graduate Course in AGSC

The committee approved the new graduate course in Irrigation, Integrated Water Resources Management (AGSC 330) to be offered by the AGRI department.

### 6. Transfer of Elective Courses from the Diploma in Food Security (FSEC) to M.S. programs

The committee approved the request of the Agriculture department to allow the transfer of the following graduate elective courses completed by students under the Diploma in Food Security program to the M.S. requirement in Agricultural Economics (AGEC) or M.S. in Rural Community Development (RCODE):

- FSEC 300: Food Security Challenges and Contemporary Debate (3 cr.)
- FSEC 305: Agriculture: Technology, Supply Chains, Sustainability (3 cr.)
- FSEC 310: Nutrition Security: Assessment and Intervention Strategies (3 cr.)
- FSEC 315: Food Policies and their Planning Process (3 cr.)

## 7. New Master's Program in Food Safety (FSAP)

The committee approved the new Master program in Food Safety (FSAP)

## 8. New Master's Program in Public Health Nutrition (PHNT)

The committee approved the new joint Master program with Health Sciences in Public Health Nutrition (PHNT).

## 9. Awarding the MS Degree

The committee recommended awarding the MS degree to twenty-seven students in their respective majors: 15 in Nutrition, 5 in Food Technology, 2 in Ecosystem Management, 1 in Animal Science, 2 in Poultry Science, 1 in Plant Protection, and 1 in Agricultural Economics.

# The Research Committee

Prepared by: Dr. Rami Zurayk, LDEM Chairman and professor

## Membership

Rami Zurayk, Chairperson

Farah Naja, Secretary

Yousef Abou Jawdeh

Hadi Jaafar

## Actions

During the academic year 2014-2015, the Faculty Research Committee (FRC) held several meetings during which a number of actions were taken:

- Modifying the proposal review process from a paper-based to fully electronic. This required the review and adaptation of relevant processes and forms.
- Revising the proposal scoring procedure and the electronic scoring sheet.  
This came as an outcome of the drive by URB to standardize the scoring process. The scoring was based on the following four aspects:
  - 1- Alignment with FAFS research strategy
  - 2- Applicant professorial ranking
  - 3- Research productivity from previous URB grants
  - 4- Budget
- Revising the format of the progress reports to be submitted for the two years grants
- Approval of the renewal of grants (see table 2)

Table 2: Renewed grants

PI Full Name	Proposal Title
Maria Gabriella Trovato	Landscape Atlas
Mohamad Ghassan Abiad	Household food waste generation in urban Lebanon: behavioral patterns, economic costs and policy options
Shady Hamadeh	Adaptation strategies of small ruminants' production systems to environmental constraints in semi-arid areas of Lebanon - Shouf and West Bekaa

- Approval of periodic research and junior faculty research leave requests:

### Periodic Paid Research Leaves

- Dr. Elie Barbour for the AY 2015-2016
- Drs. Imad Toufeili and Farah Naja for fall semester 2015-2016

### Junior Paid Research Leaves

- Drs. Hadi Jaafar and Trovato for fall semester 2015-2016
- Revising the progress reports of Drs. Abiad, Trovato and Hamadeh
- Evaluating the research papers that were submitted for the CC Rebeiz Award and submitting a recommendation to the dean (see table 3)

Table 3: Research papers submitted for the CA and CC Rebeiz Award for Agricultural Research

Applicant Name	Paper Title
Yaser Abunnasr	Windows of opportunity: addressing climate uncertainty through adaptation plan implementation
Omar Obeid	Low phosphorus status might contribute to the onset of obesity
Isam Bashour	Antibiotic uptake by plants from manure-amended soils
Ammar Olabi	Characterization of the sensory properties of whey protein concentrates

- Reviewing the new FAFS-research proposals and submitting recommendation to the dean (see table 4)



PI Full Name	Proposal Title
Ali Chalak	The Political economy of agrarian protest among tobacco leaf farmers in south Lebanon since 1960
Ammar Olabi	Effect of food preferences on PYY & GLP-1 (Appetite hormones) response in normal weight male subjects
Farah Naja	Exposure to trans fatty acids in Lebanon: Prevalence, determinants and the development of nutrition intervention limiting trans-fatty acid consumption
Gumataw Kifle Abebe	Supermarketization in the MENA Region: Tracking the trend and its drivers
Hadi Jaafar	Response of Lebanese marjoram ( <i>Origanum Syriacum</i> ) to irrigation and nitrogen treatments and development of its crop coefficients using a machine-to-machine irrigation system
Lamis Jomaa	Assessment of food security in Lebanon: A national study
Lara Nasreddine	Bisphenol A and the risk of hypertension in urban Lebanese adults
Mustapha Haidar	Weed seed bank density in seven-year-old conservation no-till system
Omar Obeid	The role of phosphorus in diet induced thermogenesis of both lean and obese subjects
Yaser Abunnasr	A landscape green infrastructure approach for urban greening of Beirut: Evidence-based policy guidelines and recommendations

The above activities were all documented in the minutes of the Research Committee meetings.

### Recommendations

Continue the improvement of the review process, especially in the selection of external reviewers

## The Student Affairs Committee

Prepared by: Dr. Mohamad Abiad, Chairperson

### Membership:

Mohamad Abiad, Chairperson

Ali Chalak

Mustapha Haidar

Lamis Jomaa

Susan Marie Prattis

Student Affairs Representative

Student Representative

Tharwat Haddad, Secretary

### Actions:

The committee met three times during the academic year 2014 – 2015 and discussed issues related to disciplinary actions and FAFS awards. The following recommendations were made to the FAFS Dean:

#### 1. Disciplinary Actions

- The committee endorsed the decision of FAS to reprimand one student for violating AUB's ethical code of conduct and recommended to FAFS Dean to take action against this student for reserving freshman courses for others during the spring semester 2014-2015.
- The committee endorsed the decision of FAS (with ammendment) and recommended to FAFS Dean to send a warning to one student for violating the student code of conduct by plagiarizing his power-point presentation-a requirement for AROL 263 during the fall semester 2014-2015- and proposed that the student retakes the University Plagiarism test.
- The committee recommended to FAFS Dean and the University Disciplinary Committee to proceed with the expulsion of one graduate student effective February 2015 for forging the thesis data.

#### 2. FAFS Awards

The committee recommended the students listed below to receive the following FAFS Awards:

- **Joana Haidar Award** to be granted to: **Ms. Aleel Haidar** and **Ms. Christina Choufani**
- **Edgcombe Award** to be granted to **Ms. Narie Havatian**

- **Kashadurian Award** to be granted to **Mr. Mohamad Hajj**
- **Abdul Hadi Debs Award** to be granted to **Ms. Carla El Mallah**
- **Dean Thomas Thuserland Prize for Graduate Excellence** to be granted to: **Ms. Rita Helou** and **Ms. Rania El Khoury**
- **The Dean Nuhad Dagher FAFS Graduate Student Award** (Poultry Science) to be granted to **Ms. Danielle Ayyash**
- **Penrose Award**

The committee solicited nominations from the various FAFS departments for the Penrose Award. However, only two candidates were nominated: **Ms. Zeinab Shaaban**, an undergraduate student from the Nutrition and Dietetics Coordinator Program, and **Mr. George Debs**, an undergraduate student majoring in Landscape Architecture. The committee recommended both candidates to the FAFS Dean and Faculty who voted to grant **Ms. Zeinab Shaaban** the Penrose Award for the Academic year 2014 – 2015.

### 3. Other Business

The committee discussed the difficulty of attracting reviewers for Dean Thomas Sutherland Prize and Abdul Hadi Debs Endowment Award. Accordingly, the committee delegated to the chairperson to discuss this issue with the dean and explore the possibility of providing monetary incentives to reviewers.

## II. THE FACULTY

## A. ACADEMIC MATTERS

### Faculty Recruitment and Count

The total Faculty Full Time Equivalent (FTE) for the academic year 2014/2015 counted for 42.77, of which twenty-eight were full-time faculty of professorial rank (11 professors, 3 visiting professors, 5 associate professors, 8 assistant professors and 1 visiting assistant professor).

During the academic year 2014/2015, FAFS advertised for five professorial lines: Sports and Clinical Nutrition; Biostatistics; Rural Community Development; Horticulture; and Food Microbiology. The process was completed for the RCODE; Horticulture and Biostatistics positions and recruits were expected to join FAFS in the academic year 2015-2016.

### Faculty Affairs

***Appointment of Chairs:*** Dr. Shadi Hamadeh was reappointed as Chairperson of the AGRI department as of September 1, 2015, for a period of three years.

***Workshops and Seminars:*** In alignment with FAFS's global themes and priorities, FAFS hosted workshops, seminars and symposia addressing food security, food safety, resilient environment and nutrition for health. These were organized by the relevant departments and included: 1) the 4<sup>th</sup> Mediterranean Poultry Summit in collaboration with the World Poultry Science Association (Lebanon) and CNRS; 2) a joint workshop with the Lebanese Ministry of Agriculture to promote the implementation of conservation agriculture throughout Lebanon; 3) a symposium on "Nutrition and Exercise for Health: Emerging Updates," in collaboration with the Lebanese Academy for Nutrition and Dietetics, 4) a symposium, in collaboration with Boecker, on "Emerging Trends in Food Safety and Updates from the Institute of Food Safety, Integrity, and Protection"; 5) a symposium to discuss the AFED 2014 annual report on the topic of "Food Security: Challenges and Prospects", organized jointly by FAFS's Food Security program and the Issam Fares Institute; 6) a workshop entitled "E-scape transitional settlement" in collaboration with the International Federation of Landscape Architecture (IFLA), represented by IFLA's Chair of the Educational Committee, the Center for Civic Engagement and Community Service at AUB, and the Kayani Foundation. The workshop focused on the Syrian crisis in Lebanon in an attempt to come up with a strategy of intervention in an informal settlement in Bar Elias, Bekaa.

***Other events hosted by FAFS included the following:*** FAFS celebrated the ACEND (Accreditation Council for Education in Nutrition and Dietetics) accreditation of its Nutrition and Dietetics Coordinated Program (NDCP) with a Gala dinner, whereby prominent FAFS alumnus, Mr. Raymond Debbane, President and CEO of INVUS Group, was the guest of honor and keynote speaker. The LDEM department and the Nature Conservation Center (NCC) hosted the launch and book signing of 'Trees of Lebanon' by Salma N. Talhouk et al. The LDEM department cooperated with the Swiss Embassy to hold the "Swiss Touch in Landscape Architecture" exhibition which included a lecture on "Switzerland, the Idea of Nature and Swiss Landscape Architecture" by Michael Jakob, Professor in History and Theory of Landscape at Hepia (Geneva) and Professor of Comparative Literature (Chair) at Grenoble University.

**Leadership and Other Initiatives:** The Food Security Program at FAFS succeeded in securing AUB's commitment to the PUSH Initiative (Presidents United to Solve Hunger) as lead for actions engaging the entire university. FAFS faculty and students participated in the Arab Forum for Environment and Development's (AFED) Annual conference on "Food Security: Challenges and Prospects" held in Amman, Jordan, whereby Dean Hwalla participated as panelist and her comments were broadcasted via a short film. In addition, the AFED conference report included a chapter on "Livestock and Food Security" contributed by Dr. Shady Hamadeh. Dean Hwalla and Dr. Farah Naja participated in the Exceed Meeting and Annual Planning Workshop hosted by the Food Security Center at the Universität Hohenheim in Stuttgart, Germany. Faculty members and undergraduate students from FAFS participated in the Global Forum for Innovations in Agriculture 2015 conference held in Abu Dhabi, UAE.

## Research Grants and Service Contracts

During this period, FAFS faculty members were successful in attracting research funding from local and regional agencies for a total of \$196,472. Locally, Dr. Lamis Jomaa received \$6,632 from LNCSR. Regionally, IDRC awarded Dr. Shady Hamadeh a total of \$162,800.

A service contract was signed with Agthia Group PJSC (a leading Abu Dhabi-based food and beverage company) in the amount of \$27,040 whereby Drs. Imad Toufeili and Ammar Olabi received \$10,000, and Drs. Mohamad Abiad and Marie Claire Chamieh received \$17,040.

## Accreditation, Program Reviews and New Programs

### Program Reviews:

External reviewers conducted an onsite assessment of the LDEM department's Bachelor of Landscape Architecture (BLA) program in December 2014. The reviewers' exit report was submitted to the Provost and final curricular recommendations by the University's Academic Assessment Unit are currently being addressed by the department, while recommendations on space requirements of the program still await action by the upper administration.

Based on the results of its external review in February 2014, the department of Agriculture (AGRI) completed revising its BS in Agriculture program. The revised curriculum has been approved by FAFS and awaits approval by ADC and the Senate, and is expected to become operational in 2016/2017.

### New Graduate Programs MSc in Food Security:

The MSc in Food Security has been approved by the University and registered with the Lebanese Ministry of Education. The degree is scheduled to be launched in spring 2016 once NYSED registration is completed.

### Programs in Progress:

The NFSC department developed a new BSc in Food Science and Technology and an MSc in Food Safety. The two new degrees were approved by the Faculty and will be submitted to ADC and BGS, respectively.

## Graduate Diploma and Certificate:

The Diploma in Food Security was launched in summer 2015. Five students from Lebanon and the region successfully completed the Diploma and reported high levels of satisfaction with the curriculum. The “Review for the Academy of Nutrition and Dietetics Registration Examination Workshop” was offered by the NFSC department to train and guide nutrition graduates in their preparation for the RD exam. The workshop was given by Dr. Rayane Abu Sabha from the Sage Colleges, USA, and thirteen graduates successfully completed it and received their certificates.

## Recognition

The project submitted by Dr. Isam Bashour on Conservation Agriculture received the Milano Expo 2015 Award under the category “Feed the Planet.” This award was one out of eighteen projects that were selected among 749 submissions from 140 countries. Dr. Nadim Farajalla was awarded the Texas Christian University ‘Global Innovator Award’ based on his work on issues related to water, the environment, and ecosystem management. Dr. Lara Nasreddine won the 2014 Abdul Hamid Shoman Award for Arab Researchers under the section on Health and Medical Sciences for the theme “Healthy Nutrition, including dieting and obesity.” This prize was divided between Dr. Nasreddine and Dr. Nasser Bin Mohamad Bin Nasser Al-Daghri from King Saud University, KSA. Dean Emeritus Nuha Dagher was elected as council president of the Mediterranean Poultry Network. Dean Nahla Hwalla was elected as a member of the Scientific Advisory Board for CIHEAM (International Centre for Advanced Mediterranean Agronomic Studies). She was also awarded the 2014 Susan Bulkeley Butler Leadership Excellence Award by the International Breast Cancer and Nutrition group at Purdue University.

## Visiting URB Scholar:

Two URB scholars were invited to FAFS:

- a) Dr. Pere Sala Marti, Professor at the Universitat Autònoma de Barcelona (UAB), Spain and Coordinator of the Landscape Observatory of Catalonia, and was nominated by both the LDEM and the AGRI departments as FAFS URB visiting scholar;
- b) Professor Michael Bruce Zimmermann, Head of Human Nutrition Department, Switzerland and Chair of Iodine Global Network, and was nominated by the NFSC department and presented lectures to FAFS faculty and students during his visit.

## Faculty Meetings

Prepared by: Dr. Lamis Jomaa, Assistant Professor

During the period September 1, 2014-August 31, 2015, five regular faculty meetings and two special faculty meetings were held at FAFS, and the following actions were taken:

### 1. Voting of Degrees

Faculty members voted unanimously to award B.S. 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 2014, February 2015, and May 2015 consecutively.

2. Awards:

Faculty members voted on the recommendation of the Student Affairs Committee and granted FAFS Awards as follows:

- **Edgcombe Memorial Prize:** Narie Havatian
- **Kashaduran Award:** Mohamad Hajj
- **The Joana Haidar Award:** Aleel Haidar and Christina Choufani
- **Dean Thomas Sutherland Prizes:** Rita Helou and Rania El Khoury
- **Penrose Award:** Zeinab Shaaban
- **Abdul Hadi Debs Endowment:** Carla El Mallah
- **Dean Nuhad Dagher FAFS Graduate Student Award:** Danielle Ayyash

3. Curricular Revision:

The Faculty approved the revised curriculum of the Agriculture Program, namely the BS degree in Agriculture and Diploma of Ingénieur Agricole.

4. AREC-related Decisions and Proposals:

In September 2014, faculty members voted unanimously on the principles of the ICARDA proposal to stop all commercial production activities at AREC, to freeze AREC student residency for one year, and to undertake continuous security situation reassessment while searching for alternatives to students' experiential learning activities.

## Recommendations from Special Faculty Meetings

Two special faculty meetings were held during the period of September 1, 2014-August 31, 2015, and the following recommendations were suggested:

1. During a special faculty meeting held in December 2014, Dr. Abunnasr, as representative of an ad-hoc committee convened by the Dean to study space needs at FAFS, presented the results of a new study conducted to revise current and anticipated space needs of various departments and new programs developed at FAFS. The rationale, objectives, methods, process and final recommendations for short and long-term space needs at FAFS were presented and discussed. The recommendations can be summarized as follows:

Three scenarios were presented as a way forward, with two short term options and one longer term scenario:

- Short-term scenario 1: add one floor to FAFS Wing A
- Short-term scenario 2: add one floor to both FAFS Wings A & B.
- Long-term scenario: add one additional floor to wing A and a new building to replace Wing B.



1. During a special faculty meeting held in January 2015, Dr. Talhouk, Associate Dean, presented the FAFS visibility, communication and fundraising strategy to market the various professional programs and improve the visibility of FAFS. Dean Hwalla and faculty members agreed on the importance of increasing the visibility of FAFS current programs and activities and suggested that a clear plan be prepared for the events and activities to be conducted by FAFS as part of the celebration of AUB's 150th anniversary.

## B. STUDENT STATISTICS

### Student Enrollment (2014-2015)

The total undergraduate student enrollment in the Faculty for the year (2014-2015) was 560 distributed as follows: 90 in Agriculture, 146 in Nutrition and Dietetics, 58 in Nutrition and Dietetics-Coordinated Program, 116 in Landscape Architecture, 86 in Food Science and Management, and 64 in Agribusiness. The undergraduate enrollment in (2014-2015) was approximately the same as in (2013-2014) (553).

The total graduate student enrollment in (2014-2015) was 92, 4% lower than 2013-2014 AY (96 students). The vast majority of the graduate enrollment was in the NFSC department (44) and the remaining were distributed among AGSC (26), LDEM (12) departments and RCOD (5) and FSEC (5).

Table 5: Total Student Enrollment in various FAFS programs during the academic year 2014-2015

Undergraduate Enrollment	AY 2014-2015
Nutrition and Dietetics (NTDT)	146
Nutrition and Dietetics - Coordinated Program (NTDT-CP)*	58
Food Science and Management (FSMT)	86
Agriculture (AGRI)*	90
Agribusiness (AGBU)	64
Landscape Architecture (LDAR)*	116

Undergraduate Enrollment	560
Graduate Enrollment	560
Nutrition (NUTR)	29
Food Technology (FTCH)	15
Agricultural Economics (AGEC)	4
Irrigation (IRRG)	2
Plant Protection (PLPT)	8
Plant Science (PLSC)	5
Animal Science (ANML)	4
Poultry Science (POSC)	3
Rural & Community Development (RCOD)	5
Food Security Diploma (FSEC)**	5
Ecosystem Management (ECOM)	12
Total Graduate	92
Total (UG & GR)	652

\* Agriculture, Landscape Design & Eco-Management and Nutrition & Dietetics - Coordinated Programs are 4 years programs

\*\* Food Security (FSEC) diploma is awarded after an intensive summer course.

## Historical Perspective (2014-2015)

Undergraduate enrollment as compared to 2010-2011 AY enrollment (563) witnessed a slight change. The peak enrollment years over the past five years were (2010-11) and (2014-2015). The undergraduate enrollment in the past five years is shown in Table 6.

Table 6: Number of Enrolled FAFS Undergraduate students for the last five academic years

Names	10-11	11-12	12-13	13-14	14-15
NTDT	137	122	146	178	146
NTDT-CP	20	18	14	30	58
FSMT	95	81	73	76	86
AGRI (4 years)	139	117	118	101	90
AGBU	55	91	82	73	64
LDEM (4 years)	109	101	103	95	116
VTSC	8	11	2	0	0
<b>Total Undergraduate</b>	<b>563</b>	<b>541</b>	<b>538</b>	<b>553</b>	<b>560</b>

Graduate enrollment decreased from 115 students in (2010-11) to 92 in (2014-15). This was mainly due to a drop in the number of newly admitted Plant Protection and Plant Science students. A decrease of 4% from the previous year, but overall, the number did not change much due to the inception of new Rural and Community Development major and Food Security diploma. The graduate enrollment in the past five years is shown in Table 7.

Table 7: Number of Enrolled FAFS Graduate students for the last five academic years

Program	10-11	11-12	12-13	13-14	14-15
NUTR	53	57	48	35	29
FTCH	33	40	31	20	15
AGEC	6	4	3	4	4
IRRG	3	4	3	2	2
PLPT	3	5	3	7	8
PLSC	2	2	7	6	5
SOIL	2	2	-	-	-
ECOM	9	2	9	4	12
ANML	3	3	2	4	4
POSC	1	13	5	14	3
RCOD					5
FSEC*					5
<b>Total Graduate</b>	<b>115</b>	<b>132</b>	<b>111</b>	<b>96</b>	<b>92</b>

\* A diploma in Food Security (FSEC) is awarded after an intensive summer course.

## Student Admissions (2014-2015)

### Undergraduate New Applicants:

During the academic year 2014-2015, a total of 2385 new applications were received at FAFS, of which 46% were accepted and 11% of those accepted have enrolled. In the fall semester of 2014-2015, the yield of admittance was 10% (106 enrolled out of 1025 accepted students) whereas in the spring semester of 2014-2015, the yield of admittance was 13% (11 enrolled out of 84 accepted students). There was no significant decrease in the number of enrolled undergraduate students (117) compared to the previous academic year 2013-2014 (118 students). This slight decrease was most noticeable within NTDT and AGRI programs. Table 8 shows the numbers and percentages of undergraduate new students who applied to the different FAFS programs, those who were admitted and those who enrolled in fall and spring 2014-2015.

Table 8: Number of New FAFS Undergraduate Applicants, Admitted and Enrolled during the academic year 2014-2015

First Semester 2014/2015				
Program	Applications	Admissions	Enrollment	% Yield
NTDT	596	216	29	13%
FSMT	478	255	24	9%
AGRI	334	139	13	9%
AGBU	362	164	13	8%
LDAR	440	251	27	11%
Total	2210	1025	106	10%
Second Semester 2014/2015				
Program	Applications	Admissions	Enrollment	% Yield
NTDT	41	20	2	10%
FSMT	25	10	5	50%
AGRI	67	43	0	0%
AGBU	26	6	1	17%
LDAR	16	5	3	60%
Total	175	84	11	13%

## Undergraduate Transfer Applicants:

During the academic year 2014-2015, a total of 243 transfer applications were received at FAFS, of which 130 (53%) were accepted and 53 (41%) of those accepted have enrolled. Table 9 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 2014-2015.

Table 9: Number of FAFS Undergraduate (Second Degree and Transfer) Applicants, Admitted and Enrolled during the academic year 2014-2015

First Semester 2014/2015				
Program	Applications	Admissions	Enrollment	% Yield
NTDT	44	21	11	52%
FSMT	25	13	5	38%
AGRI	17	16	8	50%
AGBU	33	19	2	11%
LDAR	29	10	6	60%
<b>Total</b>	<b>148</b>	<b>79</b>	<b>32</b>	<b>41%</b>
Second Semester 2014/2015				
Program	Applications	Admissions	Enrollment	% Yield
NTDT	24	9	3	33%
FSMT	19	13	6	46%
AGRI	18	15	7	47%
AGBU	20	11	2	18%
LDAR	14	3	3	100%
<b>Total</b>	<b>95</b>	<b>51</b>	<b>21</b>	<b>41%</b>

### Graduate Applicants:

During the academic year 2014-2015, a total of 102 graduate applications were received at FAFS, of which 59 (58%) were accepted and 24 (41%) of those accepted have enrolled. The yield was higher than 2013-2014 AY (36%). Table 10 shows the numbers and percentages of graduate students who applied to FAFS, those who were admitted and those who enrolled.

Table 10: Number of FAFS Graduate Applications and Admissions

Fall, Spring and Summer 2013-2014					
Program	Applications	Admissions	% Admitted out of applicants	Enrollment	% Yield
NUTR	40	18	45%	6	33%
FTCH	16	7	44%	2	29%
AGEC	2	2	100%	1	50%
IRRG	2	1	50%	1	100%
PLPT	3	2	67%	1	50%
PLSC	3	3	100%	0	0%
ECOM	1	1	100%	1	100%
POSC	16	11	69%	4	36%
RCOD	9	5	56%	3	60%
FSEC*	10	9	90%	5	56%
<b>Total</b>	<b>102</b>	<b>59</b>	<b>58%</b>	<b>24</b>	<b>41%</b>

\* Food Security (FSEC) diploma is awarded in the summer.



## Graduation (2014-2015):

FAFS graduated 117 undergraduate students in 2014-2015 distributed over the different majors as follows: Nutrition and Dietetics (28), Nutrition and Dietetics – Coordinated Program (14), Food Science and Management (17), Landscape Architecture (21), Agriculture (19) and Agribusiness (18). FAFS also graduated twenty-seven graduate students distributed over the different programs as follows: Nutrition (15), Food Technology (5), Ecosystem Management (2), Agricultural Economics (1), Plant Protection (1), Animal Science (1) and Poultry Science (2). The average number of M.S. graduates over the last five years was thirty students. Tables 11 and 12 show the distribution of graduated students in the different disciplines at FAFS during the past five years.

Table 11: Number of Graduated FAFS Undergraduate students for the last five academic years

Major	10-11	11-12	12-13	13-14	14-15
NTDT	41	24	24	27	28
NTDT-CP	20	18	14	15	14
FSMT	32	30	18	23	17
AGRI	16	29	10	13	19
AGBU	4	20	17	16	18
LDAR	18	23	24	21	21
VTSC	1	1	3	-	0
<b>Total Undergraduate</b>	<b>132</b>	<b>145</b>	<b>110</b>	<b>115</b>	<b>117</b>



Table 12: Number of Graduated FAFS Graduate students for the last five academic years

Major	10-11	11-12	12-13	13-14	14-15
NUTR	16	15	12	13	15
FTCH	3	13	11	9	5
AGEC	1	1	0	1	1
ANML	2	0	1	1	1
IRRG	3	0	1	1	0
PLPT	0	1	3	1	1
PLSC	0	0	1	2	0
POSC	0	0	1	1	2
SOIL	0	2	0	0	0
ECOM	0	3	2	4	2
Total Graduate	25	35	32	33	27



## C. CENTERS AND UNITS

### I. Agricultural Research and Education Center (AREC)

Prepared by: Mr. Nicolas El Haddad, AREC Farm & Facilities Manager

#### Support Staff

AREC Administration	
Names	Title
Dbouk, Hilal	Director (until June 2015)
El-Haddad, Nicolas	Farm & Facilities Manager
Yazbeck, Mirna	Secretary
Hajj Hasan, Hussein	Sales Attendant/Store Keeper
Yazbeck, Bilal	Driver/Purchaser
Sleiman, Mona	Research Assistant



AREC Physical Plant	
Names	Title
Ghosn, Hisham	Gateman/Watchman
Haidar, Naji	Assistant Mechanic
Hajj Hasan, Ali G.	Gateman/Watchman
Hajj Hasan, Khayrieh	Maid
Hajj Hasan, Mohamad	Gateman/Watchman
Kak, Mohamad	Gateman/Watchman
Kayyal, Ali	Food Service Worker
Masri, Ali	Gateman/Watchman
Mouna, Hasan	Day &/or Night Attendant (Elect. & Boiler)
Mussawi, Kuzhayyah	Gateman/Watchman
Nasser, Haidar	Janitor
Rumeh, Abdel-Karim	Farm Attendant
Shukr, Khalil	Food Service Worker
Sindian, Ali	Head Mechanic
Zein, Bassam	Mason

AREC Production	
Names	Title
El Ali, Ibrahim	Animal Attendant
Hajj Hasan, Ahmad Kassem	Livestock Production Head
Hajj Hasan, Ahmad Khalil	Creamery Operator
Hajj Hasan, Ali T.	Field Worker
Harb, Mohamad	Animal Attendant
Hamiyeh, Walid	Cook
Kayyal, Hatem	Agronomy Foreman
Mussawi, Abbas	Machine Operator
Safar, Shady	Livestock & Poultry Production Supervisor
Takesh, Nayef	Machine Operator
Yazbeck, Ali	Assistant Agronomy Foreman
Yazbeck, Hussein	Animal Attendant
Zureik, Mohamad	Poultry Production Head

AREC Library	
Names	Title
Sleiman, Samar	Library Assistant II

## AREC Clinic

## Names

## Title

Sayyed Ahmad, Mariam

Staff Nurse

Yazbek, Mona

Clinical Assistant

## Highlights

- Installing a new pre-fabricated room in the field for the watchmen for a better control of AREC land.
- Miscellaneous projects and activities implemented by the students throughout the AY 2014-2015.
- Concluding an agreement with Ms. Yasmina Wakim for a project entitled “Saffron Production as a Sustainable Crop in the Bekaa Valley”.
- Supplying the AUBMC, Carla’s Good Food Diet Center, Healthy Basket, Casper & Gambini’s with AREC Produce. The supply stopped after selling the milking cows and the pullets.
- Allocating more land and more facilities for ICARDA trials.
- ICARDA renovated two allocated facilities: “the old sheep barn” and “the chemical store”.
- As per AUB’s directive, the production activities stopped; all the animals and the egg-type pullets were sold according to AUB rules and regulations.
- Selling the unnecessary vehicles according to AUB rules and regulations.
- ICARDA Board of Trustees visited AREC and met with Dean Hwalla to discuss future collaboration between AUB and ICARDA.
- President Peter Dorman, Dean Nahla Hwalla, and AUB Board of Trustees visited AREC.
- Water harvesting project.
- Unifert Field Day was also held with the participation of many agricultural engineers and farmers from different countries.
- Many national and international guests visited AREC.
- Improving AREC landscape by establishing more flowers and turf gardens.
- Completing the installation of IP Cameras for better security control.
- Remodeling and refurbishing the main lounge through the generous support of the President Club.
- Repairing the flat panels of the Men’s dormitory solar system and changing the display of both Men and Women’s solar panels for better efficiency.
- Designing a new irrigation network for AREC plots and installing seven submersible pumps for efficient water collection in pools.

- Purchasing a new medium sized generator to replace the 545 kva and the 200 kva and signing a maintenance agreement with PowerMET company for one year.
- A Lebanese based non-governmental organization, with a mission to help the Syrian refugees in the current crisis, was based at AREC. Many training workshops were held benefiting from the Center's teaching facilities.

## Personnel

- Mr. Hilal Dbouk resigned from his position as AREC director.
- AUB terminates the contract of Mr. Fouad Hajj Hassan (AREC boiler operator/pipe fitter) due to a bad behavior that contradicts with AUB policy.
- Mr. Shehadeh Hajj Hassan , Mr. Abdallah Abou Eid, and Mr. Mohamad Kak got early retirement.

## Teaching

- Twenty seven AGR III and Twenty eight LDEM III students continued their spring and summer sessions at AREC.
- Dr. Adib Saad accompanied with 20 students visited AREC (AGSC 201).
- Acquainting the students with the different practical farm operations on daily basis.
- Preparing the necessary tools for different lab experiments.
- Assisting students in the implementation of their projects.
- Demonstrating the different systems of engines and the use of farm machinery.
- Providing assistance to the students in the implementation of their projects.
- Supplying the mechanical engineering students with weather and production data for the renewable energy projects that is implemented at AREC.
- Providing accommodation and teaching facilities to AUB visiting-professors and students.
- Helping the students in their Master projects.



## Research Funding

- Rehabilitating and remodeling the conventional poultry house by installing a bio-digester and solar panels in order to be operated by alternative energy. The Project is funded by ESCWA.
- Rain water harvesting project was executed for the first time at AREC by four mechanical engineer students.

## Services

- AREC provided assistance to faculty members and graduate students in the following research projects:
  - Management of Orobanche Ramosa in Potato
  - Comparison of No-till potato production to conventional practices using different treatments of water and straw
  - Determination of water requirements of thyme grown in the bekaa valley
- Several workshops and training courses were carried out at AREC aiming at community development and outreach:
  - Dr. Obeid – Dareen Shatila organized a three-day training workshop for forty participants on “Nutrition in Emergencies”
  - Civic Engagement and Community Service (CCECS) students spent four days at AREC and achieved three projects: constructing a base for the guard room, plastering the cracks of the poultry house, and installing irrigation system at the entrance
  - Four-day training courses on conservation agriculture took place at AREC with the participation of forty four students from four Lebanese agricultural faculties
- AREC provided assistance to ICARDA in the different field cultural practices and the maintenance of the allocated facilities.
- AREC started providing agricultural services to the farmers in the neighboring village such as land preparation, chemical application and harvesting.

## Strategic Challenges

- Rehabilitating and remodeling the conventional poultry house by installing a bio-digester and solar panels in order to be operated by alternative energy.
- Designing a new irrigation network for AREC plots and installing seven submersible pumps for efficient water collection in pools.

## II. Environment and Sustainable Development Unit (ESDU)

Prepared by:

Ms. Mabelle Chedid, Research Assistant

Dr. Shadi Hamadeh, Chairperson and Professor

### Personnel

Shadi Hamadeh, ESDU Director

Diana Marroush Abi-Said, Administrative-Financial Officer

Ziad Moussa, Capacity Development and Outreach Officer

Mabelle Chedid, Executive Officer

Dominique Anid, Health & Nutrition Officer

Marwa Soubra, Health & Nutrition Officer

### ESDU Associates

Salwa Tohmé Tawk, Knowledge Management Officer/ Training and Organizational Development Specialist

Mounir Abi-Said, Training and Organizational Development Specialist

### Highlights

During the academic year 2014-15, ESDU implemented several projects covering a budget of 278,179 USD, with funds from the private sector and different international donor agencies.

#### Regional Networking (KariaNet)

*Knowledge Access for Rural Inter-connected Areas Network*, is a regional network funded by IDRC and IFAD 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 the ESDU was selected to be the hosting organization. The portal is now being transferred to a new server with new design and content and is “open access” for users since the end of 2015. ESDU will align KariaNet activities with local food systems, contextualize success cases, link with regional and international networks and centers in the region.

#### Capacity Building

*“Mainstreaming Evaluation: Theory and Practice in the MENA Region”*. The project is funded by IDRC and provides capacity development, small R&D 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 the first MENA Professional Association on Development Evaluation- “EvalMENA”.



## Rural Development

*“Souk aal Souk for promoting nutrition education in universities and organic agriculture in Wakf lands”*. This project aims at implementing a series of farmers’ markets to promote local organic and healthy products and build linkages between small-scale producers and urban residents, as well as training producers on good agricultural practices and organizational and managerial skills to sustain the market. It builds on a previous project also funded by Waterfront City Cares.

*“Establishing a Food Trail in the Higher Shouf and West Beqaa Regions”*. In partnership with the Food Heritage Foundation and the Shouf Biosphere Reserve, a network of villages was established to promote food and agricultural heritage through tourism: Darb el Karam food heritage trail. Touristic packages were developed and the trail hosts were trained and are now ready to receive visitors and guests. This project is funded by USAID through the LIVCD program.

*“Supporting community kitchens and kitchen gardens for Syrian refugees and host communities in Lebanon”*. Supported by Dr. Scholl Foundation Grant Program, the project aims at enhancing the social rehabilitation, food security, health and nutritional diversity among the most vulnerable host families and Syrian refugees, while providing benefits to the host community by ultimately creating an income generation source for women. In partnership with the Hariri foundation, seventeen Lebanese, Syrian, and Palestinian ladies received a set of training on food safety, healthy eating, and managerial and entrepreneurship skills, and prepared healthy traditional meals that were distributed to 400 vulnerable families in Old Saidia.

*“GHATA: Bringing education to informal tented settlements”*. This project is implemented in partnership with Kayany Foundation and the Center for Civic Engagement and Community Service (CCECS) and funded by Reach Out to Asia – Qatar Foundation. It aims at establishing in three schools hosting Syrian refugees’ students, three small kitchens/cooking units serving healthy food to school children (4-14 years). Menus of healthy food options/snacks will be developed, and the capacity of the cooking ladies will be built on food safety and standardized recipes.

## New academic program

*“The RCODE Master of Sciences Program in Rural Community Development”*. Under the FAFS, ESDU launched its new Graduate program leading to the degree of Master of Science (MS) in Rural Community Development (RCODE, thesis or non-thesis) in fall 2014 by enrolling the visiting Professor Dr. Michelle Obeid, as part-timer. Dr. Guiliano Martiniello was recruited for the position of Assistant Professor, effective fall 2015-2016, for a period of four years. In addition to teaching, Dr. Martiniello is responsible for the overall management of the RCODE program, including promoting and networking with national and international programs for students’ exchange and research projects, in addition to monitoring. Seven students are enrolled in the program.

## Strategic Challenges

- to attract students for the RCODE Master program
- to sustain KariaNet regional knowledge management network
- to put local food systems on the regional and international food security agenda

### III. DEPARTMENTAL REPORTS

## A. DEPARTMENT OF AGRICULTURE



Prepared by:

Dr. Shadi Hamadeh, AGRI Chairman, Mr. Rami Elhusseini, AGRI RA

Dr. Lina Jaber, AGRI , Assistant to Chair

### Highlights

- The department's research on Conservation Agriculture, led by Dr. Bashour, received the Feeding Knowledge Award for the international call for papers during Milano Expo 2015 "Feeding the Planet, Energy for Life." This Award was granted to eighteen projects out of 749 submitted from 140 countries.
- The department was successful in presenting a full revision of the BS in Agriculture program that was approved by the FAFS faculty. Accordingly, the faculty members started working on new syllabi development.
- The department established a Recruitment and Restructuring Strategy in line with the needs of the new Agriculture program and the FAFS' drive in Food Security.
- Members of the department, active in the DVM Committee, submitted for approval a proposal for the establishment of a veterinary school and a new DVM program at AUB.
- The department developed a restructuring strategy for the graduate programs to allow an effective course offering rotation with sufficient number of students in each course.
- The department approved a strategic action plan for the Agribusiness program to improve its visibility and student recruitment.
- The department was successful in arranging the students' residency at AREC with normal teaching and expanded experiential learning opportunities in view of continuous security situation reassessment, and after having considered freezing it for the year 2014-15.
- The department produced eighteen scientific manuscripts, accepted in peer reviewed journals/scientific series, three chapters in book, and more than twenty abstracts and articles in proceedings, as well as farmer pamphlets and handbooks.

## Personnel

The AGRI department has eleven full time faculty members, one visiting professor of practice and one visiting assistant professor of Agribusiness Marketing and Management, one instructor and fourteen part-time faculty members (total FTE: 17.56 based on fall semester data), two senior research assistants (one on a research grant). Graduate assistants were appointed for the fall and spring semesters. The tables below detail the personnel in the Agriculture department.

Full-time Faculty	
Names	Title
Shady Hamadeh	Chairman
Adib Saad	Professor
Youssef Abou Jawdeh	Professor
Isam Bashour	Professor
Mustapha Haidar	Professor/ AREC Director
Elie Barbour	Professor
Mohamad Farran	Professor
Jad Chaaban	Associate Professor
Ali Chalak	Assistant Professor
Hadi Jaafar	Assistant Professor
Susan Prattis	Assistant Professor
Jamal Sawwan	Visiting Professor of Practice
Gumataw Abebe	Visiting Assistant Professor
Rachel Bahn	Instructor

Part-time Faculty		
Names	Title	Semester
Youssef El Khalil	Lecturer	Fall, Spring
Maya Nehme	Lecturer	Spring
Boutros Madani	Instructor	Spring
Saada Dakdouki	Lecturer	Fall
Hashem El Hussein	Instructor	Fall, Spring
Rami Ollaik	Instructor	Fall, Spring, Summer
Elias Ghadban	Instructor	Spring
George Battikha	Senior Lecturer	Spring
Hania Shahhal	Instructor	Spring
Arlette Lteif	Lecturer	Spring
Makram Bou Nassar	Lecturer	Spring, Summer
Kanj Hamade	Lecturer	Fall, Spring
Amer Najm	Instructor	Summer
Rawan Nassar	Instructor	Fall, Spring

Research Assistants	
Names	Title
Lina Jaber	Senior Research Assistant
Hana Sobh	Senior Research Assistant (on grant)
Rami El Hussein	Departmental Research Assistant
Dina Saleh	Part-Time Research Assistant
Alexandra Irani	Research Assistant (on grant)
Tala Ismail	Research Assistant (on grant)
Anthony Ghandour	Research Assistant (on grant)
Farah Ahmad	Research Assistant (on grant)
Ali Mrowe	Research Assistant (on grant)



Graduate Assistants	
Names	Title
Masahiro Morita	Fall 2014, Spring 2015
Hassan Awada	Fall 2014, Spring & Summer 2015
Hadi Roumanos	Fall 2014 & Spring
Walaa Siblani	Fall 2014, Spring 2015
Samia Hamati	Fall 2014, Spring 2015
Patil Tawidian	Fall 2014, Spring & Summer 2015
Razan Dbaiibo	Fall 2014, Spring 2015
Ghassan Mahmoud	Fall 2014, Spring & Summer 2015
Roger Mazloun	Fall 2014, Spring & Summer 2015
Zein Khraizat	Fall 2014, Spring 2015
Michele Moawad	Fall 2014
Sandra Youssef	Fall 2014, Spring & Summer 2015
Youssef Nassif	Spring, Summer 2015
Mohamad Mortada	Fall 2014, Spring & Summer 2015
Raquel Yammine	Spring 2015

## Teaching Activities

Fall 2014-15 Undergraduate				
Course		Credits	Enrollment	Instructor
AGSC	201	2	31	Saad
AGSC	204	3	15	Haidar, Dakdouki
AGSC	211	3	10	Chalak
AGSC	212	3	34	Khalil, Nassar
AGSC	212	3	35	Khalil, Nassar
AGSC	213	3	19	El Housseini
AGSC	215	3	20	Bashour
AGSC	219	3	13	Ollaik
AGSC	219	3	10	Ollaik
AGSC	220	3	26	Haidar
AGSC	221	3	24	Nehme
AGSC	232	3	7	Abou Jawdeh
AGSC	235	2	28	Tawk
AGSC	236	3	20	Bahn
AGSC	239	0	17	Bahn
AGSC	240	0	15	Bou Nassar
AGSC	241	3	20	Khalil, Nassar
AGSC	248	3	14	Abebe



### Fall 2014-15 Undergraduate

Course		Credits	Enrollment	Instructor
AGSC	262	3	7	Jaafar
AGSC	292	5	9	Bou Nassar
AGSC	295	3	4	Abou Jawdeh
AGSC	296	1	4	Saad
AVSC	220	3	23	Barbour, Farran, Hamadeh
AVSC	230	3	12	Prattis
AVSC	243	3	23	Hamadeh
AVSC	271	3	19	Farran
AVSC	275	3	19	Barbour
AVSC	279	3	29	Barbour
AVSC	281	3	20	Farran

### Fall 2014-15 Graduate

Course		Credits	Enrollment	Instructor
AGSC	301	3	8	Hamadeh/Chalak
AGSC	312	3	2	Bashour
AGSC	326	3	2	Jaafar
AGSC	384	3	6	Hamadeh
AGSC	388	3	5	Abou Jawdeh, Haidar, Nehme
AGSC	395	1	2	Haidar
AVSC	306	3	3	Barbour
AVSC	388	3	4	Hamadeh, Barbour
AVSC	395	1	1	Haidar

Spring 2014-15 Undergraduate				
Course		Credits	Enrollment	Instructor
AGSC	201	2	48	Saad
AGSC	202	3	11	Lteif, Jaafar
AGSC	203	3	17	Saad
AGSC	210	3	6	Abebe
AGSC	212	3	33	Khalil, Nassar
AGSC	212	3	32	Khalil, Nassar
AGSC	213	3	23	El Housseini
AGSC	219	3	16	Ollaik
AGSC	219	3	15	Ollaik
AGSC	222	1	21	Haidar
AGSC	224	3	21	Battikha
AGSC	225	3	21	Ghadban
AGSC	228	3	21	Jaafar
AGSC	231	3	21	Bashour
AGSC	240	0	13	Bou Nassar
AGSC	248	3	2	Abebe
AGSC	253	3	22	Abebe & Shahhal
AGSC	255	3	18	Chaaban
AGSC	265	3	23	Bashour

### Spring 2014-15 Undergraduate

Course		Credits	Enrollment	Instructor
AGSC	284	3	21	Haidar
AGSC	292	5	12	Bou Nassar, Bahn
AGSC	295	3	10	Abou Jawdeh
AGSC	296	1	15	Saad
AVSC	220	3	32	Farran
AVSC	222	3	21	Prattis
AVSC	224	3	20	Barbour
AVSC	230	3	20	Prattis
AVSC	281	3	24	Farran

### Spring 2014-15 Graduates

Course		Credits	Enrollment	Instructor
AGSC	307	3	2	Bashour
AGSC	310	3	4	Jaafar
AGSC	376	3	14	Chalak
AGSC	384	3	5	Chaaban
AGSC	389	3	3	Chalak
AVSC	304	3	3	Barbour
AVSC	305	3	3	Barbour
AVSC	396	1	1	Barbour

### Summer 2014-15 Undergraduate

Course		Credits	Enrollment	Instructor
AGSC	219	3	10	Ollaik
AGSC	223	2	19	Haidar
AGSC	226	3	19	Najm
AGSC	229	3	10	Bou Nassar
AGSC	236	3	1	Chaaban
AGSC	256	1	11	Bou Nassar
AVSC	226	3	19	Farran

### Summer 2014-15 Graduate

Course		Credits	Enrollment	Instructor
AGSC	399	9	1	Jaafar
AGSC	399	9	1	Abou Jawdeh
AGSC	399	9	1	Bashour
AGSC	399B	9	1	Haidar
AGSC	399B	9	1	Jaafar
AGSC	399C	9	1	Haidar
AVSC	396	0	2	Barbour

## Completed Theses

- Danielle Ayyash, 2015. "Evaluation of an Echinacea-based anti-coccidial preparation against different *Eimeria* spp. in broilers". MS Poultry Science. Advisor: **Dr. Elie Barbour.**
- Youssef Obeid, 2015. "Standardization of a protocol for inactivation of pulverized Avian Influenza Virus (AIV) by essential oils". MS Animal Science. Advisor: **Dr. Elie Barbour.**
- Harout Akilian, 2015. "Effect of a dietary ligno-cellulose on egg hatchability and performance parameters of commercial broiler breeders and on their progeny grown till market age". MS Poultry Science. Advisor: **Dr. Mohamad T. Farran.**
- Alexandra Irani, 2015. "The impact of climate change on the production of wheat in Lebanon". MS Agriculture Economics. Advisor: **Dr. Jad Chaaban.**
- Samia Hamati, 2015. "Potential of local microalgae cultures for biodiesel production and for disease management". MS in Plant Protection. Advisor: **Dr. Yusuf Abou Jawdeh.**
- Ali Msheik, 2015. "Effect of no-till straw mulching system on water productivity, growth and yield of potato". MS in Plant Science. Advisor: **Dr. Mustapha Haidar.**
- Zein Khraizat, 2015. "Water productivity of *origanum syriacum* under different irrigation and nitrogen treatments". MS Irrigation. Advisor: **Dr. Hadi Jaafar.**
- Walaa Siblani, 2015. "Reduced rates of metribuzin and hilling time for weed management in potato". MS in Plant Science. Advisor: **Dr. Mustapha Haidar.**

## Research Funding

### Internal Grants

Four members of the AGRI department received the following University Research Board grants (URB)

- Chalak, A. "Household food waste generation in urban Lebanon: Behavioral patterns, economic costs and policy options".
- M. Haidar. "Response of potato and *orobanche ramosa* to fluridone".
- Hamadeh, S. "Adaptation strategies of small ruminants production systems to environmental constraints in semi-arid areas of Lebanon-Shouf and West Bekaa".
- Jaafar, H. "A Landsat-based remote sensing model for monitoring effects of conflict on Agriculture: the case study of the Orontes basin, Syria".

### Local, Regional and International Grants

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

- Abou Jawdah, Y. "Development of tomato with combined resistance to tomato yellow leaf curl virus and abiotic stress". Al-Balqaa Univ., Jordan. 2012-2015.

- Abou Jawdah, Y. "Production of biodiesel from algae in selected Mediterranean countries". European Union- European Neighborhood and Partnership Instrument (ENPI). 2012-2015.
- Abou Jawdah, Y. "Almond witches' broom phytoplasma: epidemiology, detection and management".
- Abou Jawdah, Y. "Organizing and coordinating a molecular training for the subgroup detection of the phytoplasma strains". Ministry of Agriculture Lebanon/ Italian cooperation.
- Bashour, I. "Effect of hydrogel amendment on growth and survival of plants in two types of soils". LARI.
- Chaaban, J. "Socio-economic survey of Palestinian refugees in Lebanon". United Nations Relief and Works Agency for Palestinian Refugees in the Near East (UNRWA).
- Chalak, A. "Motorists' willingness to switch to clean-fuel vehicles and the implications for public and environmental health: The case of Greater Beirut". Issam Fares Institute for Public Policy & International Affairs, Lebanon.
- Farran, M. "Effect of dietary lignocellulose on egg hatchability and performance parameters of broiler breeders and their progeny under commercial settings". ETN Food Engineering.
- Hamadeh, S. "Bringing education to informal tented settlements - Establishment of School Kitchen". Reach Out to Asia- Qatar Foundation. 2015-2016.
- Hamadeh, S. "Hosting the Regional Knowledge Management and Knowledge Sharing Network - KariaNet Project". IDRC. 2015-2018.
- Hamadeh, S. "Supporting community kitchens and kitchen gardens for host communities and Syrian refugees". Scholl Foundation. 2015.
- Hamadeh, S. "Establishing a food trail in the High Shouf and West Bekaa region". DAI. 2014-2015.
- Hamadeh, S. "Souk al Souk- promoting nutrition education in universities and organic agriculture in Wakf Land". Waterfront City. 2014-2015.
- Jaafar, H. "Hydrologic modeling of the Orontes basin". International Center for Agricultural Research in Dry Areas.

## Publications

### Books/ Chapters in books

- **Chaaban, Jad.** 2014. "Determinants and likely evolution of global tobacco leaf demand", in W. Leppan, N. Lecours and D. Buckles (eds.), Tobacco control and tobacco farming separating myth from reality, Anthem Press.
- **Hamadeh, S.K.,** Jaber, L.S., and Diehl, K.E. 2015. "Livestock and food security in the Arab region: Policy impact within the Euro-Mediterranean framework". In: 'Building sustainable agriculture for food security in the Euro-Mediterranean area: challenges and policy options', Maria Cristina Paciello (Ed.), Editioni Nuova Cultura, Roma, Italy. pp. 61-81.
- **Hamadeh, S.,** A.K. Sadik, M. El Solh and N. Saab (eds). 2014. "Livestock and food security in Arab countries", In: Arab Environment (7): 'Food security, challenges and prospects, the 2014 Report of the Arab Forum for Environment and Development'.

## International Refereed Journals (Corresponding/Senior Author\*)

- Abou-Daoud, J., Ghanawi, **M. T. Farran**, D. A. Davis and I.P. Saoud. 2014. "Effect of dietary protein level on Y. growth performance and blood parameters of marbled spinefoot *Siganus rivulatus*". *Journal of Applied Aquaculture*, 26 (2): 103-118.
- Abrahamian, P., Sobh H., Seblani R., **Abou-Jawdah Y.** 2015. "Co-infection of two criniviruses and a begomovirus enhances the disease severity in cucumber". *European Journal of Plant Pathology*. DOI 10.1007/s10658-015-0630-y (CR)
- **Barbour, Elie K.**, Chibli A. Abou Assi, Houssam Shaib, **Shadi Hamadeh**, Muhammad Murtada, Ghassan Mahmoud, Sooham Yaghmoor, Archana Iyer, Steve Harakeh and Taha Kumosani. "Evaluation of a *Salmonella enteritidis* vaccine and related ELISA for respective induction and assessment of acquired immunity to the vaccine and/or *Echinacea purpurea* in Awassi Ewes". *Vaccine*. 2015, 5;33(19):2228-31. doi: 10.1016/j.vaccine.2015.03.035.
- **Barbour, Elie K.**, Danielle B. Ayyash, Wafa Yaseen A. Alturkistni, Areej Homaid M. Alyahiby, Soonham S.M. Yaghmoor, Archana Iyer, Steve Harakeh, and Taha Kumosani. 2015. "Global significance of sporadic reporting of poultry *Salmonella* serovars from non-participatory developing countries in WHO-GFN program". *Journal of Infections in Developing Countries*, 9(1):001-007 doi:10.3855/jidc.5065.
- **Barbour, Elie K.**, Tamar J. Kassabian, Houssam Shaib, Zeina Kassaify, Archana Iyer, Esam Azhar, Steve Harakeh, Taha Kumosani. 2015. "The significance of *Escherichia coli*-induced mastitis in cows associated with the presence of virulence genes and wide range-resistance to 20 antimicrobials". *International Journal of Applied Research in Veterinary Medicine*. 13(1):51-63.
- Chedid, M., Jaber, L.S., Giger-Reverdin, S., Duvaux-Ponter, C., **Hamadeh, S.**, 2014. "Water stress in sheep under arid environments". *Canadian Journal of Animal Sciences*, 94:243-257.
- Hecht, J., Reid, S. and **Chalak, A.** 2014. "A marketing analysis of the equitability of water/sewerage service improvements". *Journal – American Water Works Association* 107(4). (Ali Chalak, Corresponding Author).
- **Jaafar H. H.**, Zurayk R., King, C., Ahmad, F. and Alouta, R. 2015. "Impact of the Syrian conflict on irrigated agriculture within the Orontes Basin". *International Journal of Water Resources Development*. <http://dx.doi.org/10.1080/07900627.2015.1023892>
- **Jaafar, Hadi H.** 2014. "Maximizing hydropower production from reservoirs: the case study of Markaba". *Lebanese Science Journal*, Vol. 15, No. 2, 2014.
- Jaber, L.S., **Barbour, E.K.**, Abi Said, M., Chedid, M., Giger-Reverdin, S., Duvaux Ponter, C., Morand-Fehr, P, **Hamadeh, S.K.**, 2015. "Responses to intermittent watering in lactating Shami goats". *Journal of Applied Animal Research*, 43(1):39-45.
- Jawhari M., Abrahamian P., Ali Abdel Sater, Sobh H, Tawidian P. and **Abou Jawdah Y.** 2014. "Specific PCR and real-time PCR assays for detection and quantitation of 'Candidatus *Phytoplasma Phoenixicum*' ". *Molecular and cellular probes*, <http://dx.doi.org/10.1016/j.mcp.2014.12.003>. (CR)
- King, C. and **Jaafar H.** 2015. "Rapid assessment of the Water-Energy-Food Climate Nexus in six selected basins of North Africa and West Asia undergoing transitions and scarcity threats".

International Journal of Water Resources Development. <http://dx.doi.org/10.1080/0900627.2015.1026436>.

- **Prattis, S.**, Jurjus, A. 2015. "Spontaneous and transgenic rodent models of inflammatory bowel disease". *Laboratory Animal research*, 31(2): 47-68.
- Tedeschi R., Picciau L., Quaglino F., **Abou-Jawdah Y.**, Molino Lova M., Jawhari M., Casati P., Cominetti A., Choueiri E., Abdul-Nour H., Piero Attilio Bianco P.A., Alma A. 2015. "A cixiid survey for natural potential vectors of 'Candidatus Phytoplasma Phoenixicum' in Lebanon and preliminary transmission trials". *Annals of Applied Biology* doi:10.1111/aab.12188.
- Tamsah, M., Hanna, L., **Saad, A.** (Corresponding author) 2014. "First report of Xylella Fastidiosa associated with Oleander Leaf Scorch in Lebanon". *Journal of Crop Protection*, 4(1):131-137.
- Usayran, N.N., H. Sha'ar, G.W. Barbour, S.K. Yau, F. Maalouf, and **M.T. Farran**, 2014. "Nutritional value, performance, carcass quality, visceral organ size, and blood clinical chemistry of broiler chicks fed 30% faba bean diets". *Poultry Science*, 93(8):2018-27.

## Local Journals

- Irani, A., & **Chalak, A.** (2014). "Harnessing motorists' potential demand for hybrid electric vehicles in Lebanon: Policy options, CO2 emissions reduction and welfare gains". *Sustainable Transport Policy Brief No. 2*. Beirut. Climate Change and Environment in the Arab World Program, Issam Fares Institute for Public Policy and International Affairs.
- Irani, A., & **Chalak, A.** (2014). "Commuters' behavior towards upgraded bus services in Greater Beirut: Implications for greenhouse gas emissions, social welfare and transport policy". *Sustainable Transport Policy Brief No. 3*. Beirut. Climate Change and Environment in the Arab World Program, Issam Fares Institute for Public Policy and International Affairs.

## Abstracts and Conference Proceedings

- Abdelkader O., Hamati S., Jawhari M., Seblani R., Mrad Z., Mouneimne Y., Bouhadir K., Saoud I., Tzovenis I., and **Abou Jawdah Y.** 2014. "Potential biodiesel production from mixed phytoplankton cultures collected off the Lebanese coast". *The Second International Conference on Renewable Energies for Developing Countries (REDEC 2014)* [www.redeconf.org]. Order of Engineers and Architects of Beirut, November 26 and 27, 2014. IEEEExplore in press.
- **Abou-Jawdah Y.**, Sobh H., Abrahamian P., Samsatly J., and Jawhari M. 2014. "Emerging invasive whitefly-transmitted virus diseases of cucurbit crops in the Mediterranean region: case study Lebanon". *Arab Journal of Plant Protection* 32: E74-75.
- **Barbour, E. K.**, D. Ayyash, H. Shaib, R. Bragg, E. Azhar, S. Harakeh, and T. Kumosani. 2014. "Koch's postulate in reproduction of broiler coccidiosis by co-infection with eight most common Eimeria spp.: a model for future evaluation of new biologics". *Book of abstracts of the World Poultry Science Association Convention (The 4th Mediterranean Poultry Summit of the WPSA)*, September 2-5, 2014, American University of Beirut.
- **Barbour, Elie K.**, R. El-Hakim, M. Kaadi, H. Shaib, D. Gerges, and P. Nehme. 2014. "Histopathology of the respiratory system in essential oil-treated broilers following a challenge with mycoplasma gallisepticum and/or H9N2 influenza virus". *Book of abstracts of the World*



Poultry Science Association Convention (The 4<sup>th</sup> Mediterranean Poultry Summit of the WPSA), September 2-5, 2014, American University of Beirut.

- **Bashour, I.**, 2015. "Effect of hydrogel amendment on growth and survival of plants in two types of soils" presented at the 25th Annual International Conference on Soil, Water, Energy and Air, March 23-26, 2015, San Diego, California.
- **Chaaban, J.** 2015. "What tobacco control is not doing to the global demand for tobacco leaf," at the 16th World Conference on Tobacco or Health, Abu Dhabi, 21 March 2015.
- **Chalak, A. and Abiad, M.** 2014. "The Interplay of qualitative and quantitative messages in shaping consumers' preferences for food safety under various certifying regimes: The case of Lebanon". Poster presented at 'EuroSense 2014: A Sense of Life', 6th European Conference on Sensory and Consumer Research, Bella Center, Copenhagen, Denmark, 7-11 September 2014.
- Diehl K.E., Bachinger J., and **Hamadeh S.K.** 2015. "Requisite variety in adaptation strategies: case studies from two regions prone to climate change, Brandenburg, Germany and semi-arid Bekaa, Lebanon". The Agriculture and Climate Change - Adapting Crops to Increased Uncertainty Conference, 15-17 February, Amsterdam the Netherlands. Peer-reviewed abstract. *Procedia Environmental Sciences* 29:132133.
- Ghandour, L., Yassin, N., Nakkash, R., **Chalak, A.**, Al Aily, A., Tauk, M and Afifi, R. 2015. "Use of \ data triangulation for proposing a comprehensive national alcohol control and harm reduction policy: The case of Lebanon". 'Healthy People - Healthy Environment', 14th World Congress on Public Health, Kolkata, India, 11-15 February 2015.
- **Haidar MA**, 2014. "Biofumigation as an alternative tool to methyl bromide". Proceedings 11th Arab Congress of Plant Protection (P65, W 13), November 9-13, 2014, Amman, Jordan.
- **Haidar MA**, Farah Abi Mosleh, Ninette Karam, and Anthony Ghandour. 2014. "Phelipanche ramosa control in potato with fluridone". Proceedings 11th Arab Congress of Plant Protection (P69, W 24), November 9-13, Amman, Jordan.
- Hajj Ahmad, R., **Chalak, A.**, Olabi, A. and Toufeili, I. 2014. "Choice of Greek style yogurt is affected by its sensory properties and the eating patterns of consumers". Poster presented at 'EuroSense 2014: A Sense of Life', 6th European Conference on Sensory and Consumer Research, Bella Center, Copenhagen, Denmark, 7-11 September 2014.
- **Jaafar, H.**, 2015. "Relationships between primary production and crop yields in semi-arid and arid irrigated agro ecosystems". *International Archives of the Photogrammetry, Remote Sensing & Spatial Information Sciences*. 4/28/2015, Vol. 40-7/W3, p27-30
- **Jaafar, H.**, Asmar, J. 2015. "Effect of hydrogel amendment on growth and survival of plants in two types of soils", presented at the Annual International Conference of Soil, Water Energy and Air. March 23-March 26, 2015. San Diego, California, USA
- **Jaafar, H.**, Z. Khraizat, **I. Bashour, M. Haidar**. 2015. "Water productivity of origanum syriacum under different irrigation and nitrogen treatments using automated irrigation systems", the Water Resources Management, Proceedings of the 8th International Conference on Sustainable Water Resources Management Development, A Coruna, Spain, June 15-17, 2015, 10p.

- Sabra A. and **Haidar MA.** 2014. "Solanum elaeagnifolium and abutilon theophrasti: new invasive weeds in Lebanon". Proceedings 11th Arab Congress of Plant Protection (P66, W 14), November 9-13, Amman, Jordan. **Winner of the first prize, best research paper contest.**
- Saleh D., Hanna L., Abdelkader O., Mouneimne Y., Bouhadir K., Saoud I. and **Abou Jawdah Y.** 2014. "Potential biodiesel production from four green microalgae cultures collected off the Lebanese coast". The Second International Conference on Renewable Energies for Developing Countries (REDEC 2014) [www.redeconfor.org]. Order of Engineers & Architects of Beirut, November 26-27, 2014. IEEEExplore in press.
- Shaib, H., N. Cochet, T. Ribeiro, A. AbdelNour, G. Nemer, S. Harakeh, and **E. K. Barbour.** 2014. "Impact of passaging of H9N2-avian influenza virus in hamsters on its pathogenicity and genetic variability". Book of abstracts of the World Poultry Science Association Convention (The 4<sup>th</sup> Mediterranean Poultry Summit of the WPSA), September 2-5, 2014, American University of Beirut.
- Shdeed E., Mroweh A., and **Haidar MA.** 2014. "Selective control of *Phelipanche aegyptiaca* in potato with sublethal doses of glyphosate". Proceedings 11th Arab Congress of Plant Protection (P68, W23), November 9-13, 2014, Amman, Jordan.
- Tedeschi, R. F. Quaglino, Picciau L., M. Jawhari, **Y. Abou-Jawdah,** M. Molino Lova, P. Casati, E. Choueiri, H. Abdul-Nour, P.A. Bianco, A. Alma. 2014. "Potential vectors of 'Candidatus phytoplasma phoenicium' in Lebanon". XX National Congress of the Italian Phytopathological Society September 24, 2014.

## Services

### Youssef Abou Jawdeh

#### AUB

1. Member of the Faculty Advisor Committee
2. Member of the Faculty Research Committee

#### Others

1. Member of the Pesticide Legislation Committee, Ministry of Agriculture
2. Member of the Pesticide Scientific Committee, Ministry of Agriculture
3. Member of The American Phytopathological Society, APS MN. USA
4. Member of the Arab Society for Plant Protection, Beirut, Lebanon
5. Member of the International Working Group on Legume and Vegetable Viruses (IWGLVV)

### Elie Barbour

#### AUB

1. Chairman of the Faculty Research Committee
2. Member of AUB Task Force for DVM Development
3. Member of Graduate Committee

## Others

1. Diagnosis and control of economic poultry diseases in Lebanon including Newcastle disease, stunted syndrome, and immuno-suppressive diseases
2. Reviewer on international peer-reviewed journals

## Isam Bashour

### AUB

1. Graduate Studies Coordinator at FAFS
2. Member of the Departmental Review Committee
3. Supervising soil analysis activities

## Others

1. Follow up on Conservation Agriculture activities in Lebanon
2. Fertilizer Committee and Conversation Agriculture Committee, Ministry of Agriculture

## Jad Chaaban

### AUB

1. Undergraduate Coordinator for the Agribusiness Program
2. Member in the Interfaculty Committee on Capacity Building in Food Security, Executive Committee elected member, Nature Conservation Center for Sustainable Future- IBSAR (AY 09 10 - present)
3. Member, Issam Fares Institute for Public Policy and International Affairs, AUB
4. Senate representative for FAFS

## Others

1. President and Founding Member, Lebanese Economic Association
2. Expert, Middle East Youth Initiative - [www.shababinclusion.org](http://www.shababinclusion.org)
3. Associate Researcher, Toulouse School of Economics, GREMAQ-INRA, France.

## Ali Chalak

### AUB

1. Ad hoc Inter-departmental Committee to oversee the M.Sc. program in Rural and Community Development (RCODE)
2. Member of the Faculty Student Affairs Committee
3. Member of the University Senate Committee
4. Member of the Senate Committee for Faculty Affairs
5. Member of the Faculty Advisory Committee for the Climate Change and Environment in the Arab World Program, Issam Fares Institute for Public Policy and International Affairs
6. Member of the University Library Committee

7. Member of the University Committee on Student Affairs
8. Member of the Faculty Undergraduate Admissions Committee
9. Assistant Marshall in Commencement Ceremony

### Others

1. Reviewer for international peer reviewed journals
2. Judge and advisor for the Agribusiness section of the 'Innovative Projects Awards- 2014', South Business Innovation Center, Chamber of Commerce, Industry and Agriculture in Sidon and South, Sidon, Lebanon, June-November 2014.

### Mohamad Farran

#### AUB

1. Coordinator of Undergraduate Studies at FAFS
2. FAFS representative on the 'Poultry Committee' at the Ministry of Agriculture. FAFS representative on the 'National Feedstuffs Committee' at the Ministry of Agriculture.
3. Member of the Faculty Advisory Committee and Admission Committee
4. Member of the Faculty Undergraduate Studies Coordinator
5. FAFS representative on AUB 'Advising Steering Committee, Advising Website Committee and General Education Board'.

### Others

1. Member of Board of Administration, Lebanese National Council for Scientific Research
2. Vice President for World Poultry Science Association, Lebanese Branch
3. Member of the Lebanese Association for Advancement of Sciences
4. Advisor on the Parliamentary Committee for Agriculture and Tourism, Republic of Lebanon
5. Reviewer for national research proposals and for refereed journal
6. Chairperson of the Organizing Committee for the 4th Mediterranean Poultry Summit that was held jointly with AUB in Beirut, September 2-5, 2014
7. Helping several animal farmers and crop growers either on individual basis or through NGOs or UN organizations in Lebanon

### Mustafa Haidar

#### AUB

1. AREC Acting Director, then AREC Director
2. AGRI representative in the University Learning Outcomes Coordinating Committee
3. Member of the Faculty Advisory Committee
4. Member of the Faculty Student Affairs Committee
5. Member in the University Disciplinary Committee

6. AREC Academic Coordinator
7. Member of Ad-hoc Committee on the Revised Agriculture Program
8. Member in the Administrative Committee
9. Faculty Assistant Marshall in Commencement Ceremony

### Others

1. Chairman of the National Committee for Conservation Agriculture in Lebanon, Ministry of Agriculture
2. Secretary and Treasurer, Arab Society for Plant Protection
3. Board member in the Lebanese Autism Society
4. Member of the National Organic Agriculture Committee, Ministry of Agriculture

### Shady Hamadeh

#### AUB

1. Chairman of the Agriculture Department
2. Coordinator of the Environment and Sustainable Development Unit (ESDU)
3. Member of AUB Task Force for DVM development
4. Member of Inter-Faculty Food Security Committee

### Others

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

### Hadi Jaafar

1. Member of the Faculty Graduate Studies Committee
2. Member and Secretary of the Faculty Research Committee
3. Member of the Faculty Undergraduate Admission Committee
4. Reviewer for two refereed scientific journals

### Susan Prattis

#### AUB

1. Member of the AUB DVM Task Force
2. Member of the Faculty Student Affairs Committee

### Others

1. Scientific reviewer of several peer reviewed journals
2. Editorial panel of Symbiosis Journal of Veterinary Science
3. Member of American College of Laboratory Animal Medicine; American Veterinary Medical

Association; Academy of Management; European Society for Laboratory Animal Veterinarians; British Society of Toxicological Pathologists; American Association of Laboratory Animal Science

4. Board member of Angelica Patience Assistance - Development / Financial Committee
5. Advisor to the Animal Welfare Club

### Adib Saad

#### AUB

1. Member of the Faculty Academic Affairs Committee
2. Member of the AUB Academic Development Committee

#### Others

1. Member of the American Phyto-Pathological Society
2. Continued to serve as Senior Editor of "Phytopathologia Mediterranea", official journal of the Mediterranean Phytopathological Union

## Participation in Workshops, Meetings and Conferences

### Youssef Abou Jawdah

1. Attended the Advanced Training Seminar and Workshop on "Microalgae Biotechnology in the Euro Mediterranean Region: Achievements, Challenges and Prospects". Made an oral presentation. Almeria, Spain, October 19-24, 2014
2. Attended the Second International Conference on "Renewable Energies for Developing Countries" (REDEC 2014) [www.redecconf.org]. Made two oral presentations. Order of Engineers and Architects of Beirut. November 26 and 27, 2014
3. Attended the Regional Meeting of the Research Group on "Breeding Tomato for Resistance to TYLCV and Abiotic Stress". Assisted in organizing the meeting and presented one paper. Milano-Italy, January 19-24, 2015.
4. Organized and lectured in two workshops on "Phytoplasma in Feghal" (Byblos, Dec 2014) and "Phytoplasma in Kfarhata" (Batroun, Feb 2015)

### Elie Barbour

1. Attended the Nigerian Poultry Conference, Keynote speaker, and presented two lectures, Nov 1-7, 2014
2. Presented "Control of Economic Poultry Diseases by Natural Herbal Products" at the Mentofin Symposium in Ayutthaya, Thailand, March 3-9, 2015

### Isam Bashour

1. Attended the Expo Milano 2015, representing the AGRI department and received BSDPs Award for the "Introduction of Conservation Agriculture in Lebanon", July 7-11, 2015

2. Organized a workshop on “Conservation Agriculture” (CA) at AUB attended by the Minister of Agriculture, March 25, and few other workshops for Lebanese farmers
3. Participated in GFIA Fair in Abu Dhabi on March 2015
4. Attended and presented at the 25th Annual International Conference on “Soil, Water, Energy and Air”, March 23-26, 2015, San Diego, California
5. Attended several local and regional workshops on “Conservation Agriculture”

### Jad Chaaban

1. Attended and presented at the 16<sup>th</sup> World Conference on “Tobacco or Health”, Abu Dhabi, 21 March 2015
2. Attended a workshop at the University of Oxford organized by the Economic Research Forum and the Oxford Center for Islamic Studies, June 4-7, 2015

### Ali Chalakh

1. Attended and presented two posters at EuroSense 2014: A Sense of Life, 6th European Conference on “Sensory and Consumer Research”, Bella Center, Copenhagen, Denmark, 7-11 September 2014

### Hadi Jaafar

1. Attended the 36<sup>th</sup> International Symposium on “Remote Sensing of Environment” (ISRSE-36). May 11-16, Berlin, Germany.
2. Attended the Annual International Conference on “Soil, Water Energy and Air”. March 23-26, 2015. San Diego, California, USA.
3. Attended and presented at the Water Resources Management Conference, Coruna, Spain, June 15-17, 2015

### Mohamad Farran

1. Attended the 4th Mediterranean Poultry Summit that was held jointly with AUB in Beirut, September 2-5, 2014

### Mustafa Haidar

1. Attended and presented five papers at the 11<sup>th</sup> Arab Congress on “Plant Protection”, 9-13 November, 2014, Meridien hotel, Amman, Jordan, with one of the papers receiving the best research paper award
2. Coordinator and lecturer in the “Conservation Agriculture in Lebanon: Status and Prospective”, organized by MOA and AUB, FAFS, Feb 25, 2015

### Shady Hamadeh

1. Participated and presented at the 5<sup>th</sup> International Symposium for “Farming Systems Design”, 7-10 September 2015, Montpellier, France.
2. Invited to visit the ‘Sustainable City’ by Diamonds and Diamonds Developers, Dubai, UAE, May 18-19, 2015

3. Participated and presented at the Dubai International Humanitarian Aid and Development Conference and Exhibition held in Dubai, UAE, March 24-26. 2015
4. Participated and attended the International Conference on “Agriculture and Climate Change - Adapting Crops to Increased Uncertainty”, 15-17 February 2015, Amsterdam, The Netherlands.
5. Participated and presented at the International Conference on “Building Sustainable Agriculture for Food Security in the Euro-Mediterranean Area: Challenges and Policy Options”, 20-21 November 2014, Rabat, Morocco.

### Hadi Jaafar

1. Attended the WLI-ICARDA USAID Annual Meeting, Amman, November 11-13, 2014
2. Attended and presented at the 36<sup>th</sup> International Symposium on “Remote Sensing of Environment”, May 11-15, 2015, in Berlin, Germany

### Susan Prattis

1. Attended many seminars organized by the Center for Teaching and Learning
2. Attended the Joint Hellenic Society for Biomedical and Laboratory Animal Science, Athens, Greece, September 22-23, 2014, and attended a local workshop at the AUB CTL, November 27, 2014
3. Attended and presented at the Academy of Business and Emerging Markets Conference, Windhoek, Namibia, August 4-6, 2015
4. Attended the British Society of Toxicologic Pathology - Continuing Education, March 25, 2015

## Consultancies

**Isam Bashour:** Conducted consultancies in different Arab and African countries

**Jad Chaaban:** United Nations Development Programme (UNDP) – Team leader and Lead Author, Arab Human Development Report 2015.

## Strategic Challenges

- The department needs to develop and implement an appropriate promotion strategy for the new program aiming for a wide and diversified student body from Lebanon and the region.
- The department will be implementing its recruitment strategy with the challenge of attracting and retaining high caliber professor with long-term commitment to fill the current gaps in teaching and research lines.
- The department will re-invent its space planning for an optimal teaching and research experience, including facilities at AREC and the Green house area.
- The department will revise the graduate programs for medium and long term reforms in line with the new undergraduate program and the research strategy of the department.
- The department will review the Agribusiness program for improved alignment and synchrony with the AGRI program.



## B. DEPARTMENT OF LANDSCAPE DESIGN & ECOSYSTEM MANAGEMENT



Prepared by:

Dr. Rami Zurayk, Chairperson,

Ms. Nadine Modad, LDEM Senior Research Assistant

### Highlights

The LDEM department consists of eight full-time faculty members. Two programs are currently offered by LDEM: Bachelor of Landscape Architecture (BLA), and Masters of Sciences in Ecosystem Management (ECOM) degree, which is part of the Interfaculty Graduate Environmental Sciences Program (IGESP). In 2014-2015, LDEM graduated twenty-one BLA students and three MSc students.

### Department Academic Activities

The following was achieved during the academic year 2014-2015:

- Development of a Master of Landscape Architecture (MLA) program: The subcommittee, including Makhzoumi, Trovato (chair of committee), and Zurayk, revised and finalized the draft document of an MLA proposal. The proposal is currently under review at the Faculty's Graduate Studies Committee (GSC) level.
- Bachelor of Landscape Architecture (BLA) program registration at New York State of Education (NYSED): the proposal/self-study of the (BLA) program was submitted to NYSED during Fall 2013-2014 for approval and registration. The requested changes have been approved by NYSED in December 2014 with the condition that an external review of the program must be completed upon the graduation of the first class of students. A copy of the external review and the University's response to the review should be submitted to NYSED once completed (review expected in 2017).

- Program review document submitted to the University: The department and the program review committee (N. Farajalla, Chair of committee; Y. Abunnasr and N. Al-Akl) finalized the program review document which was submitted in October 2014 to the University Program Review Committee (PRC) and for review by external reviewers (completed and submitted in October 28, 2014).
- Program Reviewers visit (Dec. 8-10, 2014): Dr. Sue Anne Ware (Professor, Landscape Architecture, RMIT School of Architecture and Design, Australia) and Dr. Caroline LaVoie (Associate Professor, Department of Landscape Architecture and Environmental Planning, Utah State University, Logan Utah) conducted the review. The process was coordinated by Y. Abunnasr, assisted by N. Modad and E. Abdel Sater.
- Department response to program review submitted to the University: The department response to the program reviewers report was finalized and submitted in April 2015 to FAFS dean and to the University Program Review Committee (PRC).
- Program Learning Outcomes (PLOs) and Course Learning Outcomes (CLOs) assessment: Direct and indirect assessment of program and course learning outcomes were carried in April and May 2015, headed by Y. Abunnasr and assisted by E. Abdel Sater.

### New and Visiting Faculty

- Visiting Faculty: Professor Christer Bengs who joined the department as Visiting Professor for the period of two years, effective fall 2013-2014, resigned in September 2014 due to health reasons.
- New Recruit for the Landscape Architecture Faculty position: Dr. Mehran Madani joined the department as Assistant Professor of Landscape Architecture in January 2015.
- URB Visiting Scholar: Dr. Pere Sala Marti, Professor at the Universitat Autònoma de Barcelona (UAB), Spain, and Coordinator of the Landscape Observatory of Catalonia, was invited as a URB visiting scholar for the spring term 2014-2015 for the period of April 14-17, 2015. Pere Sala contributed to the LDEM and AGRI departments through a series of two lectures, a seminar and a workshop. Students and faculty from both departments took part in the workshop. His visit also helped to initiate future research collaboration between LDEM and the Landscape Observatory of Catalonia.
- Faculty on leave: Y. Abunnasr was on junior paid research leave during the spring semester 2014-2015. His research agenda included working on ecosystem applications in design and planning within urban and regional contexts to become up to date in this field and to develop a mutual research agenda. He collaborated with Dr. Elisabeth Hamin (Department of Landscape Architecture and Regional Planning) at the University of Massachusetts Amherst (UMASS) on research to transfer adaptation policies and tools to the MENA region with a focus on ecosystem based adaptation strategies such as green infrastructure (from April 17 to May 17, 2015), and developed a new elective course.

### Advertised Positions

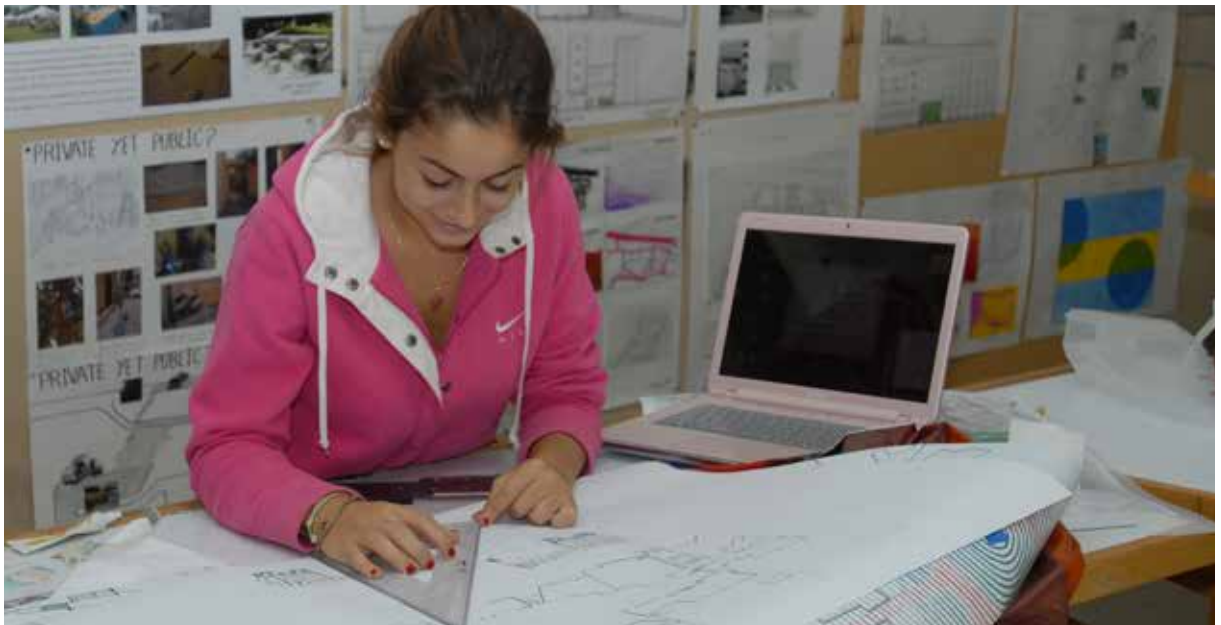
The department advertised for the vacant faculty position in Landscape Architecture for the 2015-2016 academic year (deadline October 15, 2015).

## Faculty Activities

Faculty members of the department conducted numerous activities to enhance student learning experience including:

- **Swiss Touch in Landscape Architecture Exhibition:** The 'Swiss Touch in Landscape Architecture' is an international event initiated by ProHelvetia and was brought to Lebanon by the LDEM department at AUB (lead by N. Al-Akl) in collaboration with the Embassy of Switzerland in Lebanon as part of the departmental visibility efforts. The event was open to professionals, students and the general public. Michael Jakob gave an opening lecture entitled "Switzerland, the Idea of Nature and Swiss Landscape Architecture". Michael Jakob, the curator, is a Professor in History and Theory of Landscape at Hepia (Geneva) and Professor of Comparative Literature (Chair) at Grenoble University. The exhibition continued at West Hall, Common Room until November 30, 2014. The aim of the event was to promote the field and the department as well as to raise awareness of theoretical and historical aspects of landscape architecture. The event was followed by a workshop and a round table discussion with Michael Jakob.
- **8<sup>th</sup> International Landscape Architecture Biennial, Barcelona:** Five students from 3<sup>rd</sup> and 8<sup>th</sup> years Landscape Architecture were selected to participate in the students' workshop and seminar at International Landscape Architecture Biennial which was held in RMIT University in Barcelona, Spain from September 23 to 27, 2014. This activity led by M.G. Trovato, aimed at researching contemporary and canonical designed Catalanian landscape projects in Barcelona, as well as drawing and discussing key design techniques and relationships. Various designers and guest academics were available to discuss the projects with the students.
- **Venice Biennale 2014 workshop:** The workshop 'School of Tomorrow' was held from September 15 to 21, 2014 in the Swiss Pavillon. It aimed to explore new ways of thinking about design and current problems facing societies in urban landscapes. One of the aims of the workshop was to bring together landscape architects and architects (students and instructors) to address a specific problem, the urban sprawl on the adjacent slopes to Greater Beirut. Two LDEM students from 3<sup>rd</sup> and 4<sup>th</sup> years were selected to participate in this event and were sponsored by the Masri Institute. LDEM faculties were sponsored by FAFS Dean's office. This activity was led by Y. Abunnasr and supported by N. Al-Akl as a collaboration between two departments at AUB, LDEM and Architecture.
- **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 17, 2015. The sales generated were deposited in the department's revolving fund to sustain experiential learning activities.
- **IBDAA:** LDEM students group won the first prize competition (2000 USD) with the project titled "Green Box" at the IBDAA event organized yearly by the Nature Conservation Center (NCC) under the Arts and Humanities category. The event took place on April 30, 2015.
- **Garden Show 2015:** under the supervision and coordination of W. Melhem, LDEM students designed and implemented the department stand at the Beirut garden show spring festival. This yearly event was held during May 27-31, 2015 at the Beirut Hippodrome.

- **Award ceremony of the Adlieh Roundabout design competition:** The department organized and hosted a competition where groups from 2nd and 3rd years LDEM students re-envisioned the Adlieh Roundabout space through their design interventions. The event was sponsored by BLC bank and was held on November 10, 2014. LDEM III student Nour Farhat, won the first prize of 3000 USD for her design project “The Shutter Speed Effect”. The jury consisted of a BLC committee including BLC Chairman Mr. Maurice Sehnaoui, Vice Chairman Mr. Nadim Kassar and Governor of Beirut Mr. Ziad Chbib, as well as FAFS Dean Dr. Nahla Hwalla, LDEM lecturer Ms. Nayla Al-Akl, Ms. Dina Baroud from the NDU, and Mr. Lee Frederix from LAU.
- **Book signing:** The Nature Conservation Center (NCC) and the LDEM department hosted the launch and book signing of ‘Trees of Lebanon’ co-authored by Salma N. Talhouk, Mariana M. Yazbek, Khaled Sleem, Arbi J. Sarkissian, Mohammad S. Al-Zein, and Sakra Abo Eid. The event was held on November 27, 2014. The book displays and describes the native trees of Lebanon as an initiative to enrich the awareness about environmental heritage.
- **Chair’s Award:** The 2015 Chair’s Award of Excellence was granted on May 21, 2015 to three outstanding Final Year Landscape Architecture students (Salem Agha El Saudi, Leen Maraqa, Nay Abou Chaar).
- **The Lebanese Landscape Association (LELA):** an NGO established in June 2015 by professors Jala Makhzoumi and Nayla Al Akl (LDEM-AUB) and professor Salma Smaha, Chair of the Department of Landscape at the Lebanese University, with the assistance of M.G.Trovato and Salwa Sabbagh, with the aim of promoting landscape architecture in Lebanon. Pending formal approval, LELA will serve as the Lebanese Chapter of the International Association of Landscape Architects (IFLA).



Public Lectures and Seminars			
Lecturer	About the Lecturer	Lecture/Seminar Title	Date
Sara Cohen (organized by N. Al-Akl)	Senior Associate at Sasaki from Sasaki Associates, USA	"Investigating the Chicago riverwalk and the lawn on D as investments to jump start a neighborhood"	October 2, 2014
Daniel Halsey (organized by S. Talhouk and M. Fabian)	Certified permaculture designer and teacher at multiple academic institutions and organizations in the USA (with the support of the USAID funded Farmer to Farmer program (F2F) implemented by Land O'Lakes in Lebanon)	"Vermiculture: Nutrient cycling with worms for increasing organic fertility in soil"	October 3, 2014
Michael Jakob (organized by N. Al-Akl)	Professor in history and theory of landscape at Hepia (Geneva) and Professor of comparative literature at Grenoble University	"Switzerland, the idea of nature and Swiss landscape architecture". The opening lecture was followed by an exhibition (Nov. 21-30, 2015)	November 21, 2014
SueAnne Ware	Professor, Landscape Architecture RMIT School of Architecture and Design, Australia	"Productive friction: Anti-memorials as a catalyst for social change"	December 8, 2014
Caroline LaVoie	Associate Professor, Department of Landscape Architecture and Environmental Planning, Utah State University, Logan Utah	"Vastness and intimacy: Interpreting the contrasts of the American Western landscape"	December 9, 2014
Chris Johnstone	Landscape Architect, Director and owner of Bosque Studio Australia	"100 forests - A new national arboretum for Australia"	December 10, 2014
Imad Gemayel (organized by the Landscape Architecture Student Society)	Landscape Architect and owner of IGA Architecture and Landscape Design	"Concepts of conflict/complicity between the entities which are Landscape Architecture, Architecture and Sustainability"	March 24, 2015

## Public Lectures and Seminars

Lecturer	About the Lecturer	Lecture/Seminar Title	Date
Pere Sala Marti (organized by M. G. Trovato)	URB visiting scholar; Coordinator of the Landscape Observatory of Catalonia and Professor at the Autonomous University of Barcelona, Spain	"The integration of landscape into public policies: the role of the Landscape Observatory of Catalonia"	April 15, 2015
Daniel Halsey (organized by S. Talhouk)	Certified permaculture designer and teacher at multiple academic institutions and organizations	"Permaculture"	April 15, 2015
Organized by M. G. Trovato and Y. Abunnasr	Medsapes is a two-year project funded by the EU, involving four Mediterranean countries: Cyprus, Greece, Jordan and Lebanon. The aim of the event is to disseminate the results of the first year of the project hoping to provide support for regional and local planning while raising awareness about the character of local landscape and the natural environments	"MEDSCAPES: Landscape Character Assessment as a tool for effective conservation of natural heritage in the Eastern Mediterranean"	April 16, 2015

Workshops and Forums			
Lecturer	About the event	Title	Date
Y. Abunnasr and N. Al-Akl	Venice Biennale Workshop		
Daniel Halsey	invited to LDEM as a volunteer expert through the USAID funded Farmer to Farmer Program implemented by Land O'Lakes in Lebanon.	Greenhouse vermicomposting workshop	October 9, 2014
Michael Jakob	Student's workshop, organized by N. Al-Akl and Y. Abunnasr with the participation of ten LDEM students from 3rd and 4th years, in addition to students and faculty from the Lebanese University and ALBA and a representative from the Swiss Embassy	"Alternative Reading to the Lebanese Landscape"	November 20, 2014
S. Talhouk, M. Fabian and expert Daniel Halsey	Roundtable discussion on vermicomposting initiatives in Lebanon: challenges, experiences, and ideas, and a show and tell session in the composting station at the greenhouse area, with the support of the USAID funded Farmer to Farmer program (F2F) implemented by Land O'Lakes in Lebanon.	Forum on Vermicomposting in Lebanon	April 17, 2015

### Involvement in interdisciplinary and interfaculty activities

Faculty members of the department were actively involved in university wide centers, programs and activities. Below are some examples of faculty involvement:

- ***Initiative for Green Roof Research Group:*** The department (S. Talhouk) is leading an initiative to launch a research group on urban and sustainable greening, and turning AUB as a showcase in this field. In addition to S. Talhouk, the committee consists of all LDEM full-time faculty members.
- ***Initiative for AUB Arboretum and Botanic Garden:*** the department (S. Talhouk) is leading a university wide initiative to launch AUB Arboretum and Botanic Garden. In addition to S. Talhouk, the AUBotanic Committee consists of ten other members from different faculties and units at AUB in addition to AUB friends. A Swiss delegation from the city of Geneva is in the



process of developing an agreement with the municipality of Beirut, visited AUB campus on September 15, 2014 to meet with the AUBotanic Committee.

- *AUBotanic open house*: S. Talhouk and the AUBotanic Committee organized an open house to exhibit the richness of AUB flora by showcasing more than 100 plant species. Historic documents about campus vegetation and people involved were displayed. The event took place on May 8, 2015. The main aim of this initiative was to enrich the campus flora and to deal with the increased stress on plants caused by decreased water availability, poor water quality, and increased built area.

### Department outreach activities and community involvement

- *Bridging classroom experience with community work*: The semester-long projects at AUB and the American University in Cairo (AUC) culminated in a three-day event from November 28 to 30, 2014, bringing students together to engage in round table discussions under themes related to civic engagement, sharing experiences and networking with other university students, presenting their work to the AUB community and participating in a site visit to the CCECS-KAYANY Schools in the Bekaa. This year, CCECS at AUB organized its first Student Civic Engagement Conference under the theme "Refugees and Marginalized Communities in Lebanon and Egypt". Three classes were featured in this event, including third year LDEM design studio 'Site Design in the Urban Context' (LDEM 228) lead by M. G. Trovato, B. Al-Ariss and R. Koleilat.
- *School visits to the department*: As part of departmental outreach activities, one campus tree tour was organized by M. Fabian (greenhouse supervisor) for around fifteen school students from the International College (IC) in addition to accompanying administration staff.
- *Preparatory workshop for E-scape transitional settlement*: The department organized and hosted this workshop in collaboration with the International Federation of Landscape Architecture (IFLA) represented by its Chair of the Educational Committee, the Center for Civic Engagement and Community Service (CCECS) at AUB, and Kayani Foundation. The workshop held from 16 to 23 January, 2015, focused on the Syrian crisis in Lebanon with the aim to define the appropriate strategy of intervention in an informal settlement in Bar Elias, Bekaa. This was a preliminary workshop with the participation of local and international professors, local community stakeholders and UNHCR, in preparation for an international Landscape workshop which was held in May 2015. Participants included landscape architects from AUB, the Lebanese University, ALBA University, Penn University (USA), University of Belgrade (Serbia), University of Guelph, (Canada), Arab Academy for Science and Technology (Egypt), and the University of Valencia, (Spain).
- *E-scape transitional settlement landscape international workshop*: M. G. Trovato organized this workshop in May 2015, in collaboration with the International Federation of Landscape Architecture (IFLA), the AUB Center for Civic Engagement and Community Service (CCECS), UNHCR Shelter Office of Beirut-Lebanon, and KAYANY Foundation. The main objective of this 8-day workshop was to investigate the landscape design potentiality in setting out new methodology to convey the complexity of Syrian refugees in Bar Elias, Lebanon. Ten landscape professors from international and local universities along with fifteen students from AUB attended the workshop. Participants worked with local refugees and implemented on site



sustainable problem-solving projects at the community scale such as children playground, pedestrian connection, and water garden.

- *Fascination of Plants Day 2015 - AUB campus exhibiton:* The LDEM department, in collaboration with AUB's Nature Conservation Center (NCC), participated in the international "Fascination of Plants Day 2015". The goal of the event was to get as many people as possible around the world fascinated by plants and enthused about their importance in all aspects of our life. A "Native tree appreciation" exhibition was held where information was placed about several native trees located on campus during May 18-22, 2015.
- *Baldati Bi'ati national green map exhibit:* An exhibit of fifty green maps representing fifty towns and villages was organized at AUB during fall 2014-2015. The event was attended by the minister of tourism and representatives of the participating villages.

### Space and Facilities

- *Capital budget renovations:* the department implemented a renovation project for both studios 210 and 329. Design was developed and coordinated by Y. Abunnasr and works were completed in August 2015. In March 2015, the department also acquired digital GIS coverage maps, including soil and geologic maps of Lebanon, DEM, land cover map, contour lines map, rainfall map and cadastral villages map. These are essential throughout the different academic classes of landscape architecture, but also critically needed during the final year projects. The GIS maps are also needed for research by all LDEM faculty members.
- The department also received approval for another capital budget renovation project for 2014-2015, and includes rehabilitation of the entrance of the greenhouse area which is used for teaching, research and outreach activities. Works for this project are expected to start in fall 2015-2016. The design was developed and supervised by Y. Abunnasr with the assistance of Mahmoud Bou Kenaan

### Faculty and staff recognition

- *Global Award:* N. Farajalla received the Texas Christian University (TCU), USA, 'Global Innovator Award' in February 2015. The selection was based on the years of research of Farajalla and his applied efforts on issues related to water, the environment, and ecosystem management.
- *International Appointment:* In August 2015, R. Zurayk was selected to be a member of the High Level Panel of Experts on Food Security and Nutrition, which was established in 2010 as the science-policy interface of the UN Committee on World Food Security, an inter-governmental body that serves as a forum for review and follow up of food security policies. Dr. Zurayk was the only representative from the Arab World in the steering committee that included fifteen members. He was nominated by the Arab Network for Food Sovereignty, a non-profit organization launched in 2012 to promote food sovereignty and sustainability in the Arab region.

## Student Activities

The below activities were organized by the Landscape Student Society (advisor N. Al-Akl):

- ***Students welcoming event:*** Landscape students have put together a welcoming event for the first year students to introduce them to the major and to the department. The event took place on September 9, 2014, and included a series of short presentations introducing the department, Landscape Architecture at AUB, and a book that the students wrote containing all what new students need to know about LA, including important resources that will help students with their life in AUB, internships, latest architects and projects, and even prepares for life after graduation.
- ***PARK(ing) Day:*** Beirut's third Park(ing) Day took place on September 19, 2014. PARK(ing) Day is an international event where parking spots are turned into parks for one day to promote awareness for the need of parks in a big city. The event was hosted by the Landscape Student Society.
- ***Presentations and workshops:*** Organized by the Landscape Student Society to advance knowledge in professional practice and portfolio building to all LDEM students.
- ***LDEM Student Social Media Identity:*** The Landscape Student Society established a symbol to help with their social media presence as well as established a G-mail and Facebook page for the society.
- ***Feature Night:*** A screening of short documentaries relating to the field of Landscape Architecture and subsequent discussions was organized by the Landscape Student Society.

## Personnel

The LDEM department includes six faculty members, one full time lecturer, one full time instructor and one associate to the faculty; fourteen part-time faculty members (Total FTE: 11.57 based on fall semester data) and seventeen research assistants out of fifteen were appointed on grants. Eight graduate assistants were appointed for the academic year 2014-2015. The department has one support staff. The below tables detail the personnel in the Landscape Design and Ecosystem Management department.

Full Time Faculty	
Names	Title
Yaser Abunnasr	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)
Mehran Madani	Assistant Professor
Jala Makhzoumi	Associate to the Faculty (July 1, 2012 – present)
Salma N. Talhouk	Professor; Associate Dean (January 1, 2014 – August 31, 2015)
Maria Gabriella Trovato	Assistant Professor

## Part Time Faculty

Names	Title
Balsam Ariss	Lecturer
Noura Badran	Lecturer
Joelle Baroud	Lecturer
George Battikha	Senior Lecturer
Nada Borgi	Lecturer
Hala Chmaitelly	Lecturer
Alicia Denris	Lecturer
Bachar El-Amine	Lecturer
Mohamad El-Zein	Lecturer
Mona Khechen	Senior Lecturer
Wissam Melhem	Lecturer
Ramzi Mezher	Lecturer
Halim Nader	Lecturer
Roland Riachi	Senior Lecturer

## Research Assistants

Departmental	Title
Elias Abdel Sater	Research Assistant (April 1, 2014 - present)
Nadine Modad	Senior Research Assistant (2007 - present)

Research Assistants	
On Grants	Title
Dana Ali	Part-time Research Assistant (on grant; Dr. Maria G. Trovato and Dr. Y. Abunnasr; July 1, 2014 to September 30, 2014 and Full-time RA from December 1, 2014 to December 1, 2015)
Eleni Assaf	Full-time Research Assistant (on grant; Dr. Nadim Farajalla; March 1, 2015 to June 29, 2015)
Mahmoud Bou Kanaan	Part-time Research Assistant (on grant; Dr. Maria G. Trovato and Dr. Yaser Abunnasr; July 1, 2014 to September 30, 2014 and July 15, 2015 to present)
Yasmina Choueiri	Part-time Research Assistant (on grant; Dr. Yaser Abunnasr; September 1, 2014 to May 31, 2015)
Rouba Dagher	Full-time Research Assistant (on grant; Dr. Salma Talhouk; February 1, 2015 to July 30, 2015)
Yasmine Esteitie	Full-time Research Assistant (on grant; Dr. M. G. Trovato and Dr. Y. Abunnasr; July 1, 2014 to December 31, 2014 and March 1, 2015 to present)
Nader Hilal	Full-time Research Assistant (on seed money grant; Dr. Mehran Madani; May 1, 2015 to June 29, 2015)
Sarah Ibrahim	Full-time Research Assistant (on grant; Dr. Nadim Farajalla; December 1, 2014 to January 15, 2015 and February 15, 2015 to March 14, 2015)
Hana Itani	Full-time Research Assistant (on grant; Dr. Maria G. Trovato; March 15, 2015 to June 29, 2015)
Samer Kidessi	Full time Research Assistant (on grant; Dr. Rami Zurayk; April 15, 2015 to Sep. 15, 2015)
Amani Matar	Full-time Research Assistant (on seed money grant; Dr. Mehran Madani; May 1, 2015 to June 29, 2015)
Jessika Nicolas	Full-time Research Assistant (on grant; Dr. M. G. Trovato and Dr. Y. Abunnasr; August 1, 2014 to December 31, 2014 and March 1, 2015 to present)

## Research Assistants

### On Grants

### Title

Walid Tawil

Full-time Research Assistant (on grant; Dr. Maria G. Trovato; April 15 - July 14, 2015)

Walid Tawil

Full-time Research Assistant (on grant; Dr. Maria G. Trovato; April 15, 2015 to July 14, 2015)

Malak Tfaily

Full-time Research Assistant (on grant; Dr. Nadim Farajalla; December 1, 2014 to January 15, 2015)

## Graduate Assistants

### Name

### Title

Eleni Assaf

Ecosystem Management (GRA)

Roberto Bejani

Ecosystem Management

Rouba Dagher

Urban Design

Elias Karaan

Ecosystem Management

Ranim Koleilat

Ecosystem Management

Laura Sisco

Ecosystem Management

William Thomson

Ecosystem Management

Sandra Youssef

PLSC

## Support Staff

## Name

## Title

Elias Abi Samra

Greenhouse Technician

## Teaching

### Courses Offered.

During the academic year 2014-2015, the department offered fourteen undergraduate courses and one graduate course during the fall term 2014-2015; fifteen undergraduate courses and one graduate course during the spring term 2014-2015; and six undergraduate courses and one internship course during the summer term 2014-2015.

### Student Enrollment in Courses

## Student Enrollment - Fall 2014-2015

Course	Credits	Enrollment	Instructor
LDEM 200	4	34	W. Melhem/ N. Al-Akl
LDEM 202	4	34	Y. Abunnasr (P)/ R. Mezher/ N. Bourgi
LDEM 203	3	29	R. Zurayk
LDEM 208	3	34	G. Battikha
LDEM 210	3	20	M. Fabian
LDEM 218	3	29	M. Al Zein
LDEM 219	3	19	M. Fabian
LDEM 222	4	22	G. Battikha
LDEM 228	6	27	M. Trovato (P)/ B. Al Ariss
LDEM 241	4	22	Y. Abunnasr (P)/ M. Trovato/ N. Al-Akl

### Student Enrollment - Fall 2014-2015

Course	Credits	Enrollment	Instructor
LDEM 246	6	21	N. Al-Akl (P) / H. Chmaitelly
LDEM 247	3	19	N. Farajalla
LDEM 251	3	27	H. Jaafar
LDEM 260	3	29	B. El-Amine
LDEM 635	3	9	R. Riachi

### Student Enrollment - Spring 2014-2015

Course	Credits	Enrollment	Instructor
LDEM 201	4	29	N. Al-Akl (P)/ R. Mezher/ N. Badran
LDEM 204	6	21	M. Madani (P) / M. Khechen
LDEM 207	3	50	B. El-Amine
LDEM 211	3	31	S.Talhouk(P)/ M. Fabian (lab)
LDEM 216	4	28	W. Melhem(P)/ B. El-Ariss/ J. Baroud
LDEM 217	3	23	R. Zurayk(P)/ M. Fabian (lab)
LDEM 220	1	22	M. Fabian
LDEM 222	1	28	H. Chmaitelly/ A. Denris
LDEM 230	3	78	N. Farajalla
LDEM 242	6	22	M. Trovato (P)/ N. Al-Akl/ M. Madani
LDEM 248	4	19	W. Melhem



### Student Enrollment - Spring 2014-2015

Course	Credits	Enrollment	Instructor
LDEM 263	3	30	M. G. Trovato
LDEM 264	3	11	G. Battikha
LDEM 290	3	28	N. Al-Akl
LDEM 291	3	29	H. Nader (P)/ W. Melhem
LDEM 630	3	13	R. Zurayk

### Student Enrollment - Summer 2014-2015

Course	Credits	Enrollment	Instructor
LDEM 217	3	27	I. Bashour
LDEM 221	1	21	M. Fabian
LDEM 231	3	23	N. Farajalla
LDEM 249	4	21	W. Melhem
LDEM 252	3	29	W. Melhem
LDEM 270	3	13	G. Battikha
LDEM 292	2	28	N. Al-Akl

## Completed Theses and Thesis Advising

Thirteen students were enrolled in the ECOM program for the academic year 2014-2015. In addition to serving as advisors and/or committee members to ECOM students, LDEM faculty members are also serving as advisors or committee members to other AUB or non-AUB Masters and PhD students as follows: R. Zurayk is serving as committee member to two Environmental Technology Masters students and to five PhD students in Environmental Engineering at AUB; N. Al-Akl is serving as committee member to one Urban Design Masters student at AUB. She also serves as external advisor to one Masters of Landscape Architecture student at the University of Toronto, Canada; Y. Abunnasr is serving as thesis advisor to two Urban Design Masters students at AUB; M. G. Trovato is serving as committee member to three Urban Design Masters students at AUB, and as co-advisor to one PhD student at the Mediterranean University of Reggio Calabria, Italy; S. Talhouk is serving as co-advisor to one PhD student in Bangor University, Wales (UK); N. Farajalla is serving as committee member to one Plant Protection Masters student at AUB and as the local advisor for one Political Science Masters student from the University of Pavia, Italy.

### Completed theses

	MSc student	Thesis or Project Title	Advisor/ Co-advisor	Date of Graduation
1.	Salwa Sabbagh (Urban Design)	Rethinking planning tools through the ecological landscape approach: the Case of Saida	Dr. Jala Makhzoumi	Fall 2014-2015
2.	Eleni Assaf	Deriving a planting medium from solid waste compost and excavation and demolition rubble for use in the rehabilitation of quarries	Dr. Nadim Farajalla	Spring 2014-2015
3.	Moustapha Itani	Physiognomy as a basis for plant species conservation in urban areas: Beirut as a case-study	Dr. Salma Talhouk	Summer 2014-2015
4.	Nada Ghanem	Assessing the viability of vermicomposting in Lebanon on community level : Warhanieh case study	Dr. Salma Talhouk	Spring 2014-2015
5.	Rouba Dagher (Urban Design)	Scenarios for integrating and assessing urban agriculture implementation in the informal neighborhood of Nabaa, Beirut, Lebanon	Dr. Yaser Abunnasr	Spring 2014-2015

## Theses In progress

	MSc student	Thesis or Project Type	Advisor/ Co-advisor	Expected Date of Graduation
1.	Bassam Hamzeh	Thesis	Dr. Salma Talhouk	Spring 2015-2016
2.	Elias Karaan	Thesis	Mrs. Nayla Al-Akl	Fall 2015-2016
3.	Karim Shaar	Thesis	Dr. Yaser Abunnasr	Spring 2015-2016
4.	Roger Neaimeh (Urban Design)	Thesis	Dr. Yaser Abunnasr	Spring 2015-2016
5.	Roberto Bejani	Thesis	Dr. Nadim Farajalla	Spring 2015-2016
6.	Laura Sisco	Thesis	Dr. Nadim Farajalla (co-advisor)	Spring 2015-2016
7.	Aliaa Al Dirani	Thesis	Dr. Ali Chalak	Spring 2015-2016
8.	Rima Maalouf	Project	Dr. Ali Chalak	Spring 2015-2016
9.	Ranim Koleilat	Thesis	Dr. Salma Talhouk	Spring 2016-2017
10.	William Thomson	Thesis	Dr. Rami Zurayk	Spring 2015-2016
11.	Jacqueline Chraim	New	Dr. Rami Zurayk	Spring 2016-2017

## Research Funding

### Research Retreat

The department's current and future topics of interest to be used as a basis for graduate program development and research collaboration between faculty are listed below:

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

## Local, Regional and International Grants

Faculty members launched new research and development projects supported by external and internal funding as follows:

Total number of grants: Fourteen grants (9 from international funding and 5 from AUB) as per table below:

Title	Funded by	Year	PI
The Palimpsest of agrarian change	London School of Economics (LSE)	2012-2015	R. Zurayk
Development of landscape character assessment as a tool for effective conservation of natural heritage in the Eastern Mediterranean	ENPI CBCMED Project (European Neighborhood and Partnership Instrument)	2013-2015	M. G. Trovato (PI) ;
Landscape Atlas; year 2	URB-AUB	2014-2015	Y. Abunnasr (Co-PI) M. G. Trovato (Co PI: S. Talhouk)
Lead the Lebanon component in the national partner to the capacity building programme on water integrity in the Middle East and North Africa.	Swedish International Water Institute (SIWI)	2014	N. Farajalla
Deriving a planting medium from solid waste compost and construction, demolition and excavation waste	AUB Funds	July 2014- June 2015	N. Farajalla
Invitation quality of landscape spaces within immediate neighborhoods of ALF's in Lebanon	Faculty Seed Grant	March - June 2015	M. Madani
Integrating water management scenarios into urban landscape planning under conditions of uncertainty - the case of Hamra Neighborhood, Beirut	AUB Funds (URB)	July 2014- June 2015	Y. Abunnasr
Developing a comprehensive rubric for design studio teaching assessment in the fields of landscape architecture and architecture in Beirut	American University of Beirut Research Funds, Center for Teaching and Learning (CTL)	2015-2016	Yaser Abunnasr (PI) & Nayla Al-Akl (Co-PI).
Developing skills in the field of integrated energy planning in Med Landscapes	ERASMUS+	2015-2018	Abunnasr, Y. (PI), Nadim Farajalla (Co-PI), and Rabih Jabr (Co-PI)

Title	Funded by	Year	PI
TDeveloping an integrated approach for assessment and utilization of biomass for improving the sustainability of a City	UC Davis	Sept. 2014-August 2015	S. Talhouk
2015 Biodiversity Village Awards in Lebanon	COCA COLA Foundation	Nov. 2014-Dec. 2015	S. Talhouk
Extra-curricular environmental programs at 24 schools across Lebanon	COCA COLA Foundation	Nov. 2014-Dec. 2015	S. Talhouk
Developing a chemical system for screening and fingerprinting closely related plant species	National Council for Scientific Research (CNRS)	Sept. 2013-April 2016	S. Talhouk
Fall Festival	Development Alternatives Inc	June-Dec. 2015	S. Talhouk

## Publications

In line with the department mission, research agenda and broad research themes are 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 eight articles in international refereed journals were published by the LDEM faculty members.

### International Refereed Journals (\*Corresponding/Senior author)

- **Talhouk, S.N.\***, **Y. Abunnasr**, M. Hall, T. Miller, and A. Saif. 2014. "Ancillary botanic gardens - Local contributions to plant conservation". *Sibbaldia, the Journal of Botanic Garden Horticulture* No. 12, pp 111-128, ISBN: 978-1-906129-02-6, Royal Botanic Garden Edinburgh, UK.
- **Madani, M.** 2015. "Outdoor invitation qualities of assisted living facilities located in different urban forms". *The International Journal of Aging and Society*, 5(4), 1-14. retrieved from <http://ijj.cgpublisher.com/product/pub.212/prod.136>.
- Naja, F\*, M. Alameddine, L. Itani, H. Shoaib, D. Hariri, and **S. N. Talhouk**. 2015. "The Use of complementary and alternative medicine among Lebanese adults: Results from a national survey". *Evidence-Based Complementary and Alternative Medicine*. Volume 2015, Article ID 682397, 9 pages. <http://dx.doi.org/10.1155/2015/682397>

- Marouf, M, M. Batal, S. Moledor, and **S. N. Talhouk\***. Exploring prospects of the traditional practice of wild plant collection in Lebanon. Food, Culture and Society. In Press.
- Abou-Fakhr Hammad\*, E., A. Zeaiter, N. Saliba, and **S.N. Talhouk**. 2014. "Bioactivity of indigenous medicinal plants against the cotton whitefly, *Bemisia tabaci*". Journal of Insect Science. 14 (105). Available online: <http://www.insectscience.org/14/105>
- Jaafar, H.\* , **Zurayk, R.**, King, C., Ahmad, F., and Al-Outa, R. 2015. "Impact of the Syrian conflict on irrigated agriculture in the Orontes Basin". International Journal of Water Resources Development. Online March 23, 2015. <http://dx.doi.org/10.1080/07900627.2015.1023892>
- El. Nour\*, S., Gharios, C., Mundy, **M.**, **Zurayk, R.** 2015. "The right to the village? Concept and history in a village of South Lebanon". Spatial justice journal. January 2015, No. 7
- **Zurayk, R.** 2014. "Looking at Sierra Leone's Ebola epidemic through an agrarian lens". Journal of Agriculture, Food Systems, and Community Development. Volume 5(2), 15-20 pp. online November 17, 2014. <http://dx.doi.org/10.5304/jafscd.2014.051.005>

### Articles or Chapters in Books

- **Makhzoumi, J.** 2014. "Is rural heritage relevant in an urbanizing Mashreq? Exploring the discourse of landscape heritage in Lebanon". In I Maffi and R Daher (eds) The Politics and Practices of Cultural Heritage in the Middle East. Positioning the material past in contemporary societies I.B. Tauris, London, 233-252
- **Makhzoumi, J.** 2015. "Borrowed or Rooted? the discourse of 'Landscape' in the Arab Middle East". In D. Bruns, O. Kuhne, A. Schonwald and S. Theile (eds) Landscape Culture-Culturing Landscapes: The differentiated construction of Landscapes. Springer Verlag, Wiesbaden, pp. 111-126.
- **Makhzoumi, J.** 2015. "The Greening discourse: Ecological landscape design and city regions in the Mashreq". In Robert Saliba (ed.) Urban Design in the Arab World: Re-Conceptualizing Boundaries. Ashgate, London, pp. 65-82
- **Talhouk, S.N.\***, M.M. Yazbek, K. Sleem, A.J.Sarkissian, M.S. Al-Zein, and S. Abo Eid. 2014. "Trees of Lebanon". Published by American University of Beirut, Nature Conservation Center. Pp151.
- **M. G. Trovato.** 2014. "Landscape in emergency" in 'Multicultural Landscape'
- **M. G. Trovato.** 2015. "Territories in transitions. Beirut cityscape", in Landscape Culture - Culturing Landscapes: the differentiated construction of landscapes (RaumFragen: Stadt- Region - Landschaft) Diedrich Bruns (ed), Olaf Kühne (ed), Antje Schönwald (ed), Simone Theile (ed) ISBN-10: 3658042834 ISBN-13: 978-3658042837
- **M. G. Trovato.** 2015. "Gentrification versus territorialisation. The periurban agriculture area in Beirut", in Balanced urban development: Options and strategies for liveable cities, Basant Maheshwari, Vijay P. Singh and Bhadrani Thoradeniya (Editors), Springer (Status: in press).

## Abstracts and Conference Proceedings (Corresponding/Senior author \*)

- **S. N. Talhouk.** 2014. Speaker. Biodiversity Village Award – Baldati Bi'ati. Fifth Sub-Global Assessment Network Meeting - UNEP, 26-28 October 2014, Dubai, United Arab Emirates.
- **M. G. Trovato.** 2015. "East Mediterranean Landscape Observatory", in UNISCAPE En-Route International Seminar 'Landscape Observatories in Europe II'. ISSN 2281-3195
- Abu Jaber, N., **Abunnasr Y.**, Abu Yahya A, Boulad, N., Christou, O., Dimitropoulos, G., Dimopoulos, T., Gkoltsiou, K., Khreis, N., Manolaki, P., Michael, K., Odeh, T., Papatheodoulou, A., Sorotou, A., Sinno, S., Suliman, O., Symons, N., Terkenli, T., Trigkas V., **Trovato, M.G.**, Victora, M., Zomeni, M., Vogiatzakis, I.N. 2015. "Travelling in the Eastern Mediterranean with Landscape Character Assessment". Third International Conference on Remote Sensing and Geo-information of Environment (RSCy2015), 16-19 March, 2015 – Cyprus.
- **J. Makhzoumi.** 2015. "Defining Landscape Democracy Conference", Norwegian Science University and UNISCAPE, 3-6 June 2015.
- **Trovato, M.G.** and **Abunnasr, Y.** 2014. "East Mediterranean Landscape Observatory: An Introduction". Landscape Observatories in Europe, 22-23 September 2014, Torino, Italy.
- Choueiri, Y. and **Abunnasr, Y.** Abstract 2014. "Assessing water consumption trends for integrating water management into urban landscape planning: the case study of Hamra neighborhood", Beirut, Lebanon. Urban Sustainability and Resilience 2014 conference, University college London, London, November 3-5, 2014.
- **M. G. Trovato.** 2015. "Landscape in Emergency", in Conference proceeding 'Defining Landscape Democracy', CLAD, Center for Landscape Democracy, Oslo, 2015
- **M. Madani.** 2015. "Older adults' urban lives through the invitation quality of the built environment". 'Global Cities and Cosmopolitan Dreams', Symposium conference book, Barcelona, Spain, May 17-20, 2015.

## Other publications

- **M. G. Trovato.** 2014. "Beirut cityscape e il diritto (negato) al paesaggio". in 'RIVISTA' n. 10/11, 2014 Journal of the Order of Architects, Planners, Landscape Architects and Conservators, Province of Messina, IT
- **M. G. Trovato.** 2015. "E-scape/ Landscape and refugees influx. Syrian informal settlements in Lebanon", in Landscape Architecture Australia Issue entitled New Frontiers, Future Landscapes.

## Technical reports

- **Y. Abunnasr.** October, 2014. Space analysis needs and scenarios of expansion for the Faculty of Agricultural and Food Sciences, American University of Beirut.
- **Y. Abunnasr, Y.** November, 2014. The FAFS ECO-UNIT – A showcase of agro-ecological sustainable practices; Phase 1: Master plan design.
- **Abunnasr, Y.** 2015. Assessment of short and long term facilities space needs. The Faculty of Agricultural and Food Sciences, American University of Beirut.



## Services

### Yaser Abunnasr

#### AUB

- Chair of the Ad-hoc committee for the LDEM Program Learning Outcomes Assessment; Preparing program learning assessment and reports every semester.
- FAFS representative in the University Student Faculty Committee (USFC), University Wide Committee.
- Member of the Faculty Academic Curriculum Committee (ACC).
- Member of the Faculty Undergraduate Curriculum and the Undergraduate Student Academic Affairs Committee.
- Founding member – Green Roof Research Group at LDEM.
- Member of the University Wide Committee for developing the American University of Beirut campus into a botanic garden (AUBotanic).
- Founding member – Invented Landscapes- A research group dedicated to conceptualizing alternatives to urban landscape on slopes adjacent to major urban conglomeration – joint collaboration between the Department of Landscape Design and Ecosystem Management and the Department of Architecture and Design –web link: <http://inventedlandscapes.wordpress.com/>
- Associate to the Sustainable Adaptive Gradients in the Coastal Environment (SAGE): Conceptualizing the role of coastal infrastructure in resilience.
- The ECOMENA Project – Integrated resilient and sustainable models for small scale development across the Middle East and North Africa; ongoing first application on a site within the American University campus, Beirut.
- Conceptualization and supervision of the construction of Landscape Architecture Program Studios.
- Member of the Program Review Committee (PRC). Organized, coordinated, and prepared all material and meetings for the external program review visit (December 2014).
- Design, supervision and coordination of a new greenhouse structure built on AUB campus for the LDEM department.
- Library representative for LDEM.

#### Others

- Peer reviewer, double blind, for the Journal of Landscape and Urban Planning, impact factor for 2013 is 2.314 ( five year 3.137).

## Nayla Al-Akl

### AUB

- Department visibility and students internships coordinator.
- Academic Advisor for the Landscape Student Society.
- Member of the Greenroof research group.
- Member of the Program Review Committee (short-term member to assist in specific tasks).
- Member of the MLA graduate Program Committee.
- Member of the University Wide Committee for developing the American University of Beirut campus into a botanic garden (AUBotanic).
- Designed the renovation of FAFS, Classroom 205 in Wing A.
- Chair of Faculty Student Committee at LDEM.
- In charge of LDEM student orientation.

### Others

- Co-founding member of the Lebanese Landscape Association (LELA), NGO.

## 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.
- Member of the Initiative for AUB Arboretum and Botanic Garden.
- Member of the Greenroof research group.
- Advising landscape architecture and architecture students on plants and trees used in their projects.

## 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.
- Member of the University Senate.
- Member of the Senate Committee on Faculty Affairs.
- Member of the Faculty Admissions Committee.
- Liason officer between FAFS and the FAFS Alumni Chapter (2011 to date).
- Chair of the LDEM Program Review Committee.

## Others

- Reviewer of UNDP's Arab Water Report.

## Jala Makhzoumi

### AUB

- Committee member of the Ad-hoc LDEM committee for the MLA Program Development .
- Advisory Board Member at the Nature Conservation Center (NCC).

### • Others

- Co-founding member of the Lebanese Landscape Association (LELA) as the Lebanese Chapter of the International Federation of Landscape Architects (IFLA); approval pending minor modifications of LELA bylaws.

## Salma Talhouk

### AUB

- Associate Dean of FAFS, January 2014-September 1, 2015.
- Member of the Faculty Strategic Plan Committee.
- Member of the Executive Committee of NCC (AUB's Nature Conservation Center), 2010-present.
- Member of the Faculty Advisory Committee.
- Served as Acting Dean.
- Chair of AUBotanic Committee.
- Member of the Medicinal Plant Graduate Program Planning 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 Faculty Library Committee.
- Member of the Faculty Graduate Studies Committee.
- Chair of the Ad-hoc committee for the MLA Program Development.
- Chair of the Faculty Library Committee.

- Member of the Initiative for AUB Arboretum and Botanic Garden.
- Coordinator of the landscape student participation at the E-scape transitional settlement workshop in Lebanon.

### Others

- Member of the Landscape Advisory Committee of the MEDSCAPES project.
- Member of the steering committee of the MEDSCAPES project.
- Member of the European Council of Landscape Architecture Schools (ECLAS).
- Member of Order of Architects, Planners, Landscape Architects and Conservators, Province of Messina, Italy
- Member of the editorial department of the 'RIVISTA' journal of the Order of Architects, Planners, Landscape Architects and Conservators, Province of Messina, Italy.
- Co-founding member of the Lebanese Landscape Association (LELA), NGO.

### Rami Zurayk

#### AUB

- Chairperson, Department of Landscape Design and Ecosystem Management (LDEM), January 2014 – present.
- Member of the Interdisciplinary Programs Committee (2011-current).
- Acting Director of the Interfaculty Graduate Environmental Sciences Program (IGESP).
- 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.
- Member of FAFS Administrative Committee.
- Member of the FAFS Academic Curriculum Committee.

#### Others

- Reviewer in: African Journal of Agricultural Research Journal of peasant studies.
- Serves on the Humanities team of the 'National Endowment for the Humanities' (NEH) Bridging Cultures through film development grant to work with the team of Michigan State University faculty and the Lansing-based production company, 'Message Makers' to produce a document film tentatively titled 'Beirut recycled'.
- Advisory Board Member and Columnist, Journal of Agriculture, Food Systems, and Community Development.
- Editorial Board Member, Biodiversitas Journal of Biological Diversity.

## Participation in Workshops and Conferences

### Yaser Abunnasr

- Venice Biennale 2014 workshop: Y. Abunnasr and N. Al-Akl participated with a group of LDEM students in 'the Swiss Pavillon - Venice Biennale 2014 workshop entitled 'School of Tomorrow'. This was a new event which aimed to explore new ways of thinking about design and current problems facing societies in urban landscapes. September 15-21, 2014.
- Y. Abunnasr and N. Al-Akl organized a students' workshop with Michael Jakob entitled 'Alternative Reading to the Lebanese Landscape' on November 20, 2014. The workshop was held with the participation of ten LDEM students from 3<sup>rd</sup> and 4<sup>th</sup> years, in addition to students and faculty members from the Lebanese University and ALBA, and a representative from the Swiss Embassy.
- Co-organized with Dr. Jack Ahern (USA) and Dr. Sadahisa Kato (Japan) a full day symposium at the IALE 2015 Congress (International Association of Landscape Ecology) titled: Case study application of landscape ecological thinking to design and planning of landscapes addressing climate change and impacts on ecosystem: An International survey. Portland, Oregon (USA). July 5-10, 2015.
- Presented an abstract titled: "Ecological concepts in design and planning in the Middle East: Historical precedents, project initiatives, and challenges" at IALE 2015 World Congress with the major theme being: 'Crossing scales, Crossing borders: Global approaches to complex challenges'. Portland, Oregon. July 5-10, 2015.
- Participated in the 'Second expert workshop on coastal resilience' organized by the research group Sustainable Adaptive Gradients in the Coastal Environment (SAGE) based in the USA. The workshop was held in Jamaica. June 16-20, 2015.
- Presented an abstract titled "Archaeological sites as ancillary botanical gardens: the case of Chahim, Lebanon" (co-author S.N. Talhouk) at the Cultural Landscapes and Heritage Values: Embracing Change in the Management of Place Conference held at the University of Massachusetts Amherst Campus Center. May 13-15, 2015.
- Presented at the Urban Sustainability and Resilience conference 2014, 'Assessing water consumption for integrating water management into urban landscape planning: the case study of Hamra neighborhood, Beirut, Lebanon'. Choueiri, Y. and Abunnasr, Y. The conference was held at the University of Central London, United Kingdom. November 2-5, 2014.
- Gave a presentation titled "Reflections on the meanings of resilience and sustainability for MENA Cities" at the Sustainable Cities in the Middle East and North Africa Conference, Issam Fares Institute for Policy Studies (AUB) and Friedrich Ebert Stiftung, American University of Beirut. November 4-5, 2014.
- Participated as an expert in the assessment of initial data generated for climate change vulnerability indicators for the MENA region. Venue: Vulnerability Assessment Task Force on Sensitivity and Adaptive Capacity Indicators for the Middle East and North Africa. The regional initiative for the assessment of the impact of climate change on water resources and socio-economic vulnerability in the Arab region. United Nations House, Beirut, Lebanon. October 20-23, 2014.

- Conceptualized and conducted a week long workshop titled 'Invented Landscape(s)' with fourteen students (landscape architecture and architecture) and two other instructors (landscape and architecture). Swiss Pavilion, Venice Biennale 2014. September 15-21, 2014.

### Nayla Al-Akl

- Venice Biennale 2014 workshop: Y. Abunnasr and N. Al-Akl participated with a group of LDEM students in 'the Swiss Pavillon - Venice Biennale 2014 workshop entitled 'School of Tomorrow'. This was a new event which aimed to explore new ways of thinking about design and current problems facing societies in urban landscapes. September 15-21, 2014.
- N. Al-Akl and Y. Abunnasr organized a students' workshop with Michael Jakob entitled 'Alternative Reading to the Lebanese Landscape' on November 20, 2014. The workshop was held with the participation of ten LDEM students from 3rd and 4th years, in addition to students and faculty members from the Lebanese University and ALBA, and a representative from the Swiss Embassy.

### Nadim Farajalla

- Attended the "First regional consultation meeting on the coastal aquifer supplement to the TDA-MED" organized by UNESCO-IHP. The meeting was held in Paris, France, October 28 - 29, 2014. Dr. Farajalla was nominated by the Ministry of Environment to represent Lebanon in this regional project on coastal aquifers and produced a report entitled "Assessment of Risk and Uncertainty related to Coastal Aquifers Management in Lebanon" which was submitted for publication in a peer reviewed journal.
- Participated in the "Conference of Parties (COP 20) on Climate Change" as Director of Research of IFI's Climate Change and the Environment in the Arab World program and lead efforts in organizing a side event. The conference was held in Lima, Peru. December 3-8, 2014.
- Visited the Texas Christian University (TCU), USA, in order to receive the 'Global Innovator Award' granted by the university, and gave a series of talks to classes (graduate and undergraduate) and in workshops during the period February 2-6, 2015.
- Participated in the inception workshop for the project "Policy Briefs for the Water, Energy and Food Nexus in the Arab Region" which was held in Cairo, Egypt from March 4-5, 2015. The project is funded by GIZ and the League of Arab States and managed by the Arabian Gulf University.

### Mehran Madani

- Participated in the "Global Cities and Cosmopolitan Dreams" Symposium and presented his abstract entitled "Older adults' urban lives through the invitation quality of the built environment". Barcelona, Spain. May 17-20, 2015.

### Jala Makhzoumi

- Profiled on the Aga Khan Website for Women Architects, ARCHNET, <http://archnet.org/authorities/2833>.
- Invited Speaker, Salt Institute, 15-16 April 2015, Istanbul, Turkey.

- Invited Keynote Speaker, Conference “Defining Landscape Democracy”, 3-6 June 2015, Oslo, Norway.
- International Federation of Landscape Architects (IFLA) Council Meeting, 8-9 June 2015, Moscow, Russia.

### Salma Talhouk

- Coordination of a total of ninety local mapping workshops in eighteen villages with one hundred ten residents.
- Attended the 5th Sub-Global Assessment Network Meeting which was held in Dubai, United Arab Emirates during the period October 26-28, 2014. This meeting was convened by the UNEP World Conservation Monitoring Centre (UNEP-WCMC), with the support of the European Commission, the Ministry of Environment and Water UAE, the Government of Norway, and the United Nations Environment Programme.
- Visited the Sustainable City in Dubai as part of her UC Davis grant entitled “Developing an integrated approach for assessment and utilization of biomass for improving the sustainability of a city”. May 18-19, 2015.

### Maria Gabriella Trovato

- Participated in a student workshop and a seminar at the 8<sup>th</sup> International Landscape Architecture Biennial which was held in RMIT University in Barcelona, Spain. Also participated in this event Five 3<sup>rd</sup> year Landscape Architecture students during the period September 23 -28, 2014.
- Presented an abstract entitled “East Mediterranean Landscape Observatory” at the 1<sup>st</sup> ‘UNISCAPE En-Route’ International Seminar ‘Landscape Observatories in Europe II’ which was held at the University of Torino and Politecnico of Torino, Italy. September 22-23, 2014.
- Attended “The International Conference of Cultural Landscape” organized by the International Federation of Landscape Architects (IFLA) and presented an abstract entitled “Landscape Atlas”.
- Attended a meeting entitled “IFLA Middle East Forum” which was held concurrently with the above conference. It is the first IFLA meeting aiming to form an IFLA Chapter in the Middle East. The conference was held in Tehran, Iran. November 16-18, 2014.
- Chaired the session entitled ‘The Citizen and the City: Environmental Inclusion, Equity and Public Spaces’ at the ‘Towards a Roadmap for Sustainable Cities in the MENA Region’, Issam Fares Institute, American University of Beirut, 2014.
- Attended the First Student Civic Engagement Conference under the theme “Refugees and Marginalized Communities in Lebanon and Egypt”, AUB, Center for Civic Engagement and Community Service (CCECS). Presentation’s title: ‘Landscape in Emergency-Sarafand informal settlement in Lebanon’, 2014.
- Attended a workshop entitled ‘Hima Training in the Eastern Mediterranean Region’ which was held as an activity of the MEDSCAPES-ENPI project in February 2015.
- 2014-15 ‘E-scape transitional settlement’, International Landscape Architecture workshop.

Scientific director and member of the organizing committee. AUB Landscape Design and Ecosystem Management in collaboration CCECS / AUB, IFLA and Kayani foundation.

- Attended the International Colloque, 'Paysage et images dans les pays en crises complexes', organized by Ordre des Ingénieurs et des Architectes, Beyrouth, Université libanaise, Université de Tours et CNRS, École Nationale Supérieure de la Nature et du Paysage de Blois. Presentation's title: Landscape in Emergency – Syrian refugees in Lebanon, 2015.
- Organized and presented a paper at the 1st International Seminar, 'Landscape in Emergency-Transitional settlements', American University of Beirut, FAFS/LDEM, 2015.

## Consultancies

### Yaser Abunnasr

- *FAFS Space Study*: a FAFS space study document was completed by Y. Abunnasr and submitted to FAFS dean in December 2014. The findings of the report were presented during a special faculty meeting. Comments were provided by faculty and administration. The final report was adjusted and resubmitted in its final format with schematic scenario plans on April 7, 2015 for final approval.

### Nayla Al-Akl

- *FAFS Wing A- Room 205- Upgrade and Renovation*: a design for room 205 was completed by N. Al-Akl and submitted to FAFS dean during the spring and summer semesters. Construction began in the summer semester and is currently in progress.
- *FAFS Wing A- Nutrition Lab Concept Design*: a concept design for an upgraded nutrition lab was completed by N. Al-Akl and submitted to FAFS dean in the summer semester. Design development is currently under progress.

### Jala Makhzoumi

- *Baghdad Comprehensive City Development Plan 2030*, Phase IV in association with Khatib and Alami (September-October 2014).
- *Housing Competition*, Saida, Lebanon, Landscape Concept, Client: Med Properties (June-September 2015).
- *Mecca Techno Valley*, Landscape Master Plan and development guidelines, Client: Um al Qura University, KSA (June 2015 -Ongoing).

## Strategic Challenges

Challenges to be tackled this year are:

- Finalizing the new graduate Masters of Landscape Architecture program.
- Conduct program review for the BLA program in 2017.
- Securing space for two additional studios and space for jury sessions.
- Recruitment of new faculty under current security issues and political situation.



- Hold a successful IFLA Middle East Conference, as part of AUB-FAFS 150 Celebrations (May-June 2016).
- Relevant to the issue of insufficient studio space, the department also suffers from the absence of a model shop for the design studio projects. That makes students frustrated due to their inability to express their ideas by physical models, forcing them to use the limited outside facilities which prevent them to experience hands-on skills and be active participants.
- Lack of a fixed budget for holding departmental lecture/workshop series is an obstacle for establishing an interdisciplinary discourse among the local and international scholars.



## C. DEPARTMENT OF NUTRITION AND FOOD SCIENCES

Prepared by: Dr. Lara Nasreddine, Chairperson

### Highlights

- Ms. Yara Gholmie joined the NFSC department as a full-time nutrition instructor and as Assistant Director for the Nutrition and Dietetics-Coordinated Program (NDCP).
- The NFSC department organized and hosted a workshop entitled “Review for the academy of nutrition and dietetics registration examination workshop” which was given by Prof. Rayane Abu Sabha from the Sage Colleges, U.S (August 3-7, 2015). It consisted of a three-day intensive workshop to guide students in preparation for their RD exam (the Dietitians Registration Exam) upon completion of the NDCP at AUB.
- The department welcomed Drs. Kathryn Boor (Dean, College of Agriculture and Life Sciences, Cornell University) and Martin Wiedmann (Professor in Food Safety, Cornell University), who visited the department between May 11-15, 2015, and reviewed the proposal for the new Master’s program in Food Safety.
- The NFSC department finalized an agreement with Roadster Diner for the “Annual Food Safety Lectureship series” through a \$50,000 pledge payable over 5 years.

- The NFSC department finalized an agreement with Roadster Diner for the preparation and delivery of food safety educational material for seven brunches which will be held at Roadster Diner, Bliss Branch in 2015.
- The department organized a regional training course on 'Nutrition in Emergencies' (NIE), which was attended by participants from Lebanon and the region (18-29, 2015).
- The department invited Professor Zimmermann as a URB Visiting Scholar during April 2015. Dr. Zimmermann is the Head of Human Nutrition Department, Switzerland and Chair of Iodine Global Network.
- The NFSC department, in collaboration with the department of Biology, organized a lecture on "Metabolic regulation by protein tyrosine phosphatases and their substrates". The lecture was given by Dr. Fawaz Haj (26 January, 2015).
- The department organized, in collaboration with the USAID 'Farmer to Farmer' program and 'Land O'Lakes', a certified HACCP training workshop (June 15-25, 2015). The three-day theoretical training workshop was followed by a practical session where all learned theoretical components were implemented in different food processing facilities.
- The department organized, in collaboration with Boecker®, a symposium entitled "Emerging Trends in Food Safety and Updates from the Institute of Food Safety, Integrity, and Protection (TiFSiP)". (March 2015).
- The NFSC department and Boecker® organized and provided to FAFS students a high level Food Safety training course on "Supervising Food Safety". The training took place at AUB during the period January 14 -16, 2015.
- The NFSC department, in collaboration with the Lebanese Academy for Nutrition and Dietetics, organized a symposium entitled "Nutrition and exercise for health: Emerging updates" (December 2014).
- The department hosted the "Mars Graduate Program" event on May 5, 2015, whereby Dr. Kassaify, the Global Food Safety leader at Mars, Inc., along with other managers from Mars, Inc. delivered a presentation on opportunities within the company, in addition to recruiting NFSC graduates for the Mars graduate program. Ms. Zeinab Rammal and Ms. Marie-Line Chemaly were selected for this program.
- The department developed an "Advising Manual" that provides information on core courses, pre-requisites/co-requisites and curricular planning for regular students as well as PreMed, double major and second BS students.
- More than twenty-five undergraduate students from the Food Science and Management program attended the Dubai International Food Safety conference in Dubai, UAE (November 8-11, 2014).
- The Ministry of Economy and Trade (Lebanon) invited students from AUB to assist in the Consumer Protection Directorate market surveillance duties. Volunteering students' participated in a training program before providing assistance to inspectors in their daily market surveillance patrols.

- In the context of educational activities planned for the Nutrition Month (March 2015), an interactive session on “Healthy Eating and Lifestyle” was organized and presented by Drs. Nasreddine, Jomaa and Habib, in addition to Ms. Hamzeh, on March 18, 2015 at Hariri School.
- Dr. Nasreddine participated in the write up of the proposal entitled “Transcending methods for evidence- based nutrition” which was submitted to Horizon 2020 of the European Commission (Call: H2020-MSCA-ITN-2015; Topic: MSCA-ITN-2015-ETN)
- Dr. Jomaa submitted a proposal to the IMMANA Competitive Research Grants (DFID funding). Total requested amount is £243,983.00 (British Pounds).
- The department participated in the University for Seniors whereby Mrs. Reem Hamzeh gave a lecture entitled “Food safety at home” in November, 2014, and another lecture entitled “Food safety issues in Lebanon and the region” in May 2015.
- NFSC CP students, in collaboration with the AUB Wellness Program, organized a food safety activity entitled “Eat Right. Be Safe” on March 26, 2015. NFSC CP students organized a FIT-a-thon on October 10, 2014, where nutritional booths were situated by the West Hall. NFSC CP students were involved in a ‘Nutrition Intervention’ community project at Burj Hammoud Health Center as well as “School Project: Healthy Kids”.

## Personnel

The NFSC department has thirteen full-time faculty members, including four instructors, five part-time faculty members, (Total FTE: 13.51 based on fall semester data) and twelve research assistants, eight of whom are appointed on research grants. Thirteen graduate assistants were appointed for the first semester (fall 2014-2015), twelve for the second semester (spring 2014-2015) and two for the summer session (2014-2015). The department has three support staff. The tables below provide detailed lists of personnel, GAs and RAs in the Nutrition and Food Sciences department.



Full-time Faculty	
Names	Title
Nahla Hwalla	Dean, Professor
Lara Nasreddine	Chairperson, Associate Professor Coordinator of Undergraduate Studies in Nutrition & Dietetics
Imad Toufeili	Professor
Omar Obeid	Professor
Ammar Olabi	Associate Professor
Zeina Kassaify	Associate Professor (leave without pay for 2014/2015)
Mohammad Abiad	Assistant Professor
Lamis Jomaa	Assistant Professor
Farah Naja	Assistant Professor
Ewen Todd	Visiting Professor
Marie-Claire Chamieh	Lecturer
Basma Hamadeh	Instructor
Dima El Halabi	Instructor
Yara Gholmie	Instructor

Part-time Faculty	
Names	Title
Carla Habib	Lecturer
Youssef Habbal	Part-time Instructor
Hamza Daroub	Instructor
Marie-Rose Samaha	Instructor
Krystel Ouaijan	Instructor

Research Assistants	
Names	Names
Reem Hamzeh	Jennifer Ayoub
Ghada Ziadeh	Rouba Cheaib
Dania Hariri	Bayan Rafii
Marilyne Menassa	Maya El-Mokdad
Patricia Moughames	Romy Abi Fadel
Joanna Abi Rizk	Carla El Mallah

Fall 2014-2015	
Graduate Assistant	Major
Romy Abi Fadel	Nutrition
Yasmin Aridi	Nutrition
Mariam Assaad	Nutrition
Salma Choucair	Nutrition
Christelle Cordahi	Nutrition
Ghina Hammoud	Food Technology
Lara Itani	Nutrition
Rita Jalkh	Food Technology
Line Koleilat	Food Technology
Lina Abdouni	Nutrition
Camille Georges	Food Technology
Yara Beyh	Nutrition
Sara Daher	Nutrition

## Spring 2014-2015

### Graduate Assistant

### Major

Lina Abdouni

Nutrition

Yara Beyh

Nutrition

Sara Daher

Nutrition

Camille Georges

Food Technology

Lara Itani

Nutrition

Rita Jalkh

Food Technology

Line Koleilate

Food Technology

Salma Chouccair

Nutrition

Ghina Hammoud

Food Technology

Nehmat Helou

Nutrition

Stephanie Samaha

Food Technology

Samir Hamamji

Nutrition

## Summer 2014-2015

### Graduate Assistant

### Major

Lina Abdouni

Nutrition

Line Koleilate

Food Technology



## Support Staff

## Name

## Title

Samson Atamian

Pilot Plant Supervisor

Tania Ghannam

Secretary

Samir Touma

Technician

## Teaching

## FALL Term 2014-2015

## Course No.

R

L

C

Inst/ Coord

Enrollment

NFSC 220

3

0

3

C. Murad

14

NFSC 221

3

0

3

M. Chamieh

47

NFSC 222

3

0

3

L. Jomaa

51

NFSC 240

1

3

2

M.C. Chamieh

17

NFSC 261

3

0

3

I. Toufeili

18

NFSC 265

3

0

3

I. Toufeili

54

NFSC 267

1

3

2

B. Hamadeh

62

NFSC 274

3

0

3

O. Obeid

15

NFSC 277

3

0

3

E. Todd

69

NFSC 279

0

3

1

M.R. Samaha

22

NFSC 282

3

0

3

E. Todd

18

NFSC 283

3

0

3

L. Jomaa

14

NFSC 284a

-

-

1

D. Halabi

14

FALL Term 2014-2015					
Course No.	R	L	C	Inst/ Coord	Enrollment
NFSC 287	2	0	2	M. Abiad	11
NFSC 288	2	0	3	A. Olabi/B. Hamadeh	43
NFSC 290	2	3	2	D. Halabi	45
NFSC 292	3	0	3	P. Karam/A. Barhoumi	49
NFSC 294	0	3	1	M.R. Samaha	26
NFSC 296	1	0	1	Naja/ D. Halabi	29
NFSC 298F	-	-	0	staff	14
NFSC 299	-	-	2	F. Naja	17
NFSC 300A	-	-	1	Staff	0
NFSC 300B	-	-	2	Staff	2
NFSC 300C	-	-	3	Staff	2
NFSC 305				A. Olabi	8
NFSC 307	3	0	3	F. Naja	9
NFSC 311	3	0	3	L. Nasreddine	8
NFSC 314	3	0	3	O. Obeid	5
NFSC 371	3	0	3	M. Abiad	4
NFSC 391				Mneimneh	5
NFSC 395	1	0	1	M. Abiad	3
NFSC 399	-	-	T	Staff	15
NFSC 252	3	0	3	Y. Habbal	14

## SPRING TERM 2014-2015

Course No.	R	L	C	Inst/ Coord	Enrollment
NFSC 220	3	0	3	C. Murad	56
NFSC 221	3	0	3	F. Naja	50
NFSC 224	0	3	1	K. Ouaijan	20
NFSC 229	0	3	1	MC. Chamieh	82
NFSC 240	1	3	2	MC. Chamieh	55
NFSC 261	3	0	3	I. Toufeili	20
NFSC 265	3	0	3	I. Toufeili	35
NFSC 267	1	3	2	B. Hamadeh	20
NFSC 272	2	3	2	M. Abiad	13
NFSC 274	3	0	3	O. Obeid	49
NFSC 275	1	3	2	D. Halabi	21
NFSC 278	2	3	3	E. Todd	12
NFSC 284b	-	-	1	D. Halabi	14
NFSC 287	2	0	2	M. Abiad	59
NFSC 289	0	3	1	B. Hamadeh	69
NFSC 290	2	3	3	D. El Halabi	32
NFSC 291	3	0	3	M. Abiad	19
NFSC 293	3	0	3	L. Nasreddine	52
NFSC 295	0	3	1	MR. Samaha	31
NFSC 297	0	3	1	MR. Samaha	21

SPRING TERM 2014-2015					
Course No.	R	L	C	Inst/ Coord	Enrollment
NFSC 296	31	0	1	Section1: F. Naja Section 2: A. Olabi	43
NFSC 298 S	-	-	0	MC. Chamieh	14
NFSC 299	-	-	2	F. Naja	48
NFSC 300 A	-	-	1	Staff	0
NFSC 300 B	-	-	2	Staff	2
NFSC 300 C	-	-	3	Staff	2
NFSC 301	3	0	3	H. Tamim	9
NFSC 306	3	0	3	L. Jomaa	3
NFSC 315	3	0	3	O. Obeid	7
NFSC 351	3	0	3	E. Todd	1
NFSC 370	3	0	3	A. Olabi	7
NFSC 391				Mneimneh	14
NFSC 399	-	-	T	Staff	18

SUMMER TERM 2014-2015					
Course No.	R	L	C	Inst/ Coord	Enrollment
NFSC 221	3	0	3	O. Obeid	14
NFSC 225A	0	0	0	Y. Gholmie	17
NFSC 225B	0	0	0	Y. Gholmie	16
NFSC 229	0	3	1	Dr. Chamieh	12
NFSC 275	1	3	2	D. Halabi	12
NFSC 224	0	3	1	K. Ouaijan	12
NFSC 261	3	0	3	Dr. Toufeili	21
NFSC 280	0	0	1	Dr. Abiad/Dr. Olabi	13
NFSC 300B	-	-	2	Staff	1
NFSC 300C	-	-	3	Staff	1
NFSC 399	-	-	T	Staff	5

## Completed Theses

A total of thirteen theses were completed in 2014-2015 as below:

Student Name	Thesis Topic
Rasha Zgheib	Infant and young child feeding practices in Lebanon: A national cross-sectional study.
Rita Helou	Development and validation of a food frequency questionnaire for the assessment of sodium dietary intake in Lebanese adults
Jennifer Ayoub	The effect of a 3-month pre-meal phosphorus supplementation on energy intake, body weight, and lipid profile in overweight/obese individuals.
Carla El Mallah	Urinary status of major macro-minerals of Lebanese school aged children
Romy Abi Fadel	Prevalence and determinants of complementary and alternative therapy among breast cancer patients in Lebanon
Shirine Baalbaki	Adherence to the Mediterranean diet and dietary composition among breast cancer female patients in Beirut, Lebanon: A cross-sectional study.
Yasmine Aridi	Adherence to the Mediterranean diet among breast cancer patients in Beirut, Lebanon
Hibeh Shatila	Dietary patterns and their association with obesity indices among Lebanese children 2-5 year old.
Ghina Hammoud	Investigating the inhibitory effect of free and encapsulated curcumin on food-borne pathogens.
Rola Hammoud	The effect of phosphorus supplementation on the development of fatty liver induced by a low protein in rats.
Nathalie Barakat	An assessment of sodium levels in different breads and bread intake in the Lebanese population.
Rania El Khoury	Glycemic index of bread: fiber or minerals? This is the question.
Sirine Francis	National studies of urinary fluoride status of Lebanese school children (aged 5-10 years)

## Research Funding

### Internal Grants

#### University Research Board (URB)

Four members of the department received funds from University Research Board (URB)

- Jomaa. L. Assessment of food security in Lebanon: a national study for gap funding.
- Naja, Farah. Complementary and alternative medicine use among breast cancer patients in Lebanon.
- Nasreddine. L. Validation of a food frequency questionnaire to assess sodium dietary intake against 24-hour urine sodium excretion in Lebanese adults
- Olabi. A. Effect of food acceptability on appetite hormones response in normal weight male subjects.

### Local, Regional and International Grants

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

- Jomaa. L. Dietary intake, lifestyle, and food security status of Lebanese children and adolescents (4-18 years) in relation to overweight and obesity.
- Jomaa.L. Household food security status in Lebanon: a national study.
- Naja. F. Qatar Foundation: Mother and Child cohort: Towards curbing the NCD epidemic in Qatar and Lebanon.
- Nasreddine. L. Bisphenol and the risk of hypertension in urban Lebanese adults.
- Nasreddine. L. Coca-Cola Foundation: Evidence-based nutrition intervention program/Early life nutrition and health (ELNAHL) project.
- Todd. E. To identify, characterize and control food-borne pathogens found in sesame seed-based products from Lebanon.

## Publications

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

### International Refereed Journals (Corresponding/Senior author \*)

- Salameh P\* and **Jomaa L\***, Issa C, Farhat G, Salamé J, Zeidan N and Baldi I, for the Lebanese National Conference for Health in University Research Group (2014). "Assessment of dietary intake patterns and their correlates among university students in Lebanon". Front. Public Health 2:185. doi: 10.3389/fpubh.2014.00185
- **Naja F**, Hwalla N, Itani L, Baalbaki S, Sibai A, **Nasreddine L.\*** "A novel Mediterranean diet index from Lebanon: comparison with Europe". Eur J Nutr. Nov 20, 2014.

- **Nasreddine L**, Akl C, Al-Shaar L, Almedawar MM, Isma'eel H. Consumer knowledge, "Attitudes and salt-related behavior in the Middle-East: the case of Lebanon," *Nutrients*, 13;6 :5079-102
- Saadeh C., **Toufeili I.\***, Habbal M., and **Nasreddine L**. 2015. "Fatty acid composition including trans-fatty acids in selected cereal-based baked snacks from Lebanon". *Journal of Food Composition and Analysis* 41: 81-85.
- **Olabi, A.**, Levitsky, D.A., Hunter, J.B., Spies, R., Rovers, A.P. and L. Abdouni. 2015. "Food and mood: A nutritional and mood assessment of a 30-day vegan space diet". *Food Quality and Preference* 40: 110-115. (A. Olabi as corresponding author).
- Kamleh, R., **Olabi, A.\***, Toufeili, I.\*, Najm, N.E.O. Younis, Tarek and R. Ajib. 2014. "The effect of partial substitution of NaCl with KCl on the physicochemical, microbiological and sensory properties of Akkawi cheese". *Journal of the Science of Food and Agriculture*. Sep 10. doi: 10.1002/jsfa.6906 (A. Olabi as corresponding author).
- **Olabi, A.\***, Jinjara, S., Jiménez-Flores, R., Walker J.H and H. Daroub. 2015. "Compositional and sensory differences of sweet cream and whey buttermilk products produced by microfiltration, diafiltration and super critical CO<sub>2</sub>". *Journal of Dairy Science*.
- **Olabi, A.\***, Neuhaus, T., Bustos, R., Cook, M., T. Erps and L. Abdouni. 2015. "An investigation of flavor complexity and food neophobia". *Food Quality and Preference* 42: 123-129.
- Isma'eel, HA, Sakr GE, Almedawar MM, Fathallah J, Garabedian T, Eddine SB, **Nasreddine L\*** and Elhajj IH\*. 2015. "Artificial neural network modeling using clinical and knowledge independent variables predicts salt intake reduction behavior". *Cardiovascular Diagnosis and Therapy*. 5(3): 219-228 .
- Almedawar MM, **Nasreddine L**, **Olabi A**, Hamade H, Awad E, **Toufeili I**, Arnaout S and Isma'eel HA. 2015. "Sodium intake reduction efforts in Lebanon". *Cardiovascular Diagnosis and Therapy*. 5(3): 178-185.

## Services

### Mohammad Abiad

#### AUB

- Food Science and Management Certification/Accreditation Review Task Force.
- Member of the Faculty Graduate Studies Committee.
- Member of the Faculty Undergraduate Admissions Committee.
- Member of the Faculty Library Committee.
- University Student Faculty Committee (USFC) – Elected FAFS Representative.
- Social and Behavioral Sciences Institutional Review Board (SBS-IRB) – Full Member.
- University Sports Committee – Member.
- Member of the Board of Graduate Studies.
- Member of the Nature Conservation Center Executive Committee.
- Member of the Writing Center Advisory Board.



- Member of the Senate Admissions Committee.
- Member of the K.A.S. Central Research Science Laboratory Steering Committee.
- Member of the Interfaculty Financial Aid Committee.
- IBDA (Student Innovation Initiative) Organizing Committee – Chair.
- Member of the Unified University Admissions Committee.
- Member of the Nature Conservation Center for Sustainable Futures.

### Others

Reviewer for the following Journals:

- International Journal of Food Properties.
- Food and Bioprocess Technology.
- Foodborne Pathogens and Disease.
- Journal of Food Engineering Reviews.

### Lamis Jomaa

#### AUB

- Secretary of the FAFS Faculty Committee meetings, starting September 2014.
- Member of the inter-departmental Rural Community Development Committee starting spring 2014.
- Member of the Undergraduate Admissions Committee starting September 2014.
- Member of the Student Affairs Committee for spring 2014-2015.
- Advisor of the Nutriclub for 2013-2014 academic year.

### Others

- Technical Nutrition Committee at the Ministry of Public Health starting September 2014.

### Farah Naja

#### AUB

- Member of the NCC Executive Committee.
- Member of the Faculty Research Committee.
- Member of Faculty Graduate Studies Committee.
- Member of the AUB Wellness Committee.
- Member of AUB Housing Committee.

### Others

- Examination Member of the National Nutrition Colloquium.
- Advisory Board Member of the Faculty of Health Sciences at Beirut Arab University.

- Reviewed four articles for two journals.
- Member of the Vascular Medicine Program (AUB).
- Member of the Population Health and Nutrition Study Group (PHANS) (AUB).
- Member of the Food Security and Policy in the Middle-East (FSPME) (AUB.)
- Member of the International Breast Cancer Network.

## Lara Nasreddine

### AUB

- Chair of the Department of Nutrition and Food Science (June 2014- present).
- Member of the Faculty Students' Affair Committee (September 2012- to date).
- Member of the organizing committee for the 5<sup>th</sup> Biomedical research day (October 2014- to date).
- Served as a jury member during the 5<sup>th</sup> Annual AUB Biomedical Research Day (21 February, 2015).
- Member of the Vascular Medicine Program (VMP) Executive Council (January 2013- to date).
- Member of the University Senate (September 2012-to date).
- Member of the University Senate Steering Committee (September 2012-June 2013; September 2014 to date).
- Member of the Biomedical Sciences PhD Committee (November 2012- to date).
- Member of the Campus Residents Committee (October 2007- to date).

### Others

- Reviewed for Journal of Human Lactation.
- Reviewed for the European Journal Nutrition.
- Review Editor for Frontiers in Nutrition and Environmental Sustainability.
- Organized the conference entitled "Nutrition and exercise for health: Emerging updates" AUB (December 2, 2014).

### Other services to the Community

- Organized a symposium on "Healthy eating and lifestyle" targeting 15-18 years old adolescents, Hariri school (March 18, 2015) and gave a lecture entitled "Maintain a healthy body weight".
- Member of the Population Health and Nutrition Study Group (PHANS) (AUB).
- Member of the Food Security and Policy in the Middle-East (FSPME) (AUB).
- Member of the Public Health in the Arab World (PHAW).
- Member of the WHO Regional Research in Nutrition-related NCDs (EZcollab).
- Member of the World Action on Salt & Health (WASH).
- Member of the Lebanese Action for Salt and Health (LASH).

## Omar Obeid

### AUB

- Member of IBSAR (Nature Conservation Center for Sustainable Futures)

### Others

- Member of the Nutrition Society. UK (Full member).
- Member of the Lebanese Association for Nutrition and Food Science.
- Member of the Nutrition in Emergencies Training Network (NIETN).
- Member of the Advisory Committee for the Arab Center of Nutrition.
- Member of MENANA (Middle East and North Africa Nutrition Association).
- Editor, Journal of Obesity and Overweight.

## Ammar Olabi

### AUB

- Member of the Search Committee for the Director of the Office of International Programs.
- Member of the Second Tenure Task Force FAFS Representative.
- Member of the Lebanon Action for Salt and Health Group (LASH).
- Member of the FSMT Accreditation Committee.
- Member of IBSAR (Nature Conservation Center for Sustainable Futures).
- Program Learning Outcomes Departmental Representative.
- Member, FAFS Advisory Committee.
- Member, Academic and Curriculum Affairs Committee.

### Others

- Member, Committee for Milk and Milk Products, Ministry of Agriculture (December 2009-present).
- Member, Agro-Industry Committee, Ministry of Agriculture (January 2010-present).
- Member of the National Codex Alimentarius Committee.
- Member of the World Action on Salt & Health (WASH).
- Founding Board Member, Land O Lakes Association-Lebanon (March 2014).
- Reviewer for the Journal of Food Science.
- Reviewer for the Journal of Dairy Science.
- Reviewer for the Journal of the Science of Food and Agriculture.
- Reviewer for Food Quality and Preference.
- Reviewer for Appetite.
- Member of the Institute of Food Technologists (Sensory and Quality Assurance divisions).

- Member of the American Dairy Science Association.
- Guest Lecturer in AGSC 201 (Fall 2014-15).
- Regular Guest Lecturer in AGSC 201 and recently AGSC 236 (Fall 2012-13).

### Imad Toufeili

#### AUB

- Coordinator of Graduate Studies.
- Member of the University Publications Committee.

#### Others

- Reviewer, LNCSR research proposals.

## Participation in Workshops and Conferences

### Mohamad Abiad

- Mohamad Abiad, Omar Dib, Ajay Kathuria, Saleh Al-Ghamdi, Houssam El-Rassy and Rafael Auras. "Structural properties of cyclodextrin based metal organic framework crystals in various organic solvents". MOF 2014: 4<sup>th</sup> International Conference on "Metal organic frameworks & open framework compounds". Kobe, Japan. September 2014.
- Ali Chalak and Mohamad Abiad. "The interplay of qualitative and quantitative messages in shaping consumers' preferences for food safety under various certifying regimes: The case of Lebanon". EuroSense 2014: A Sense of Life - 6th European Conference on Sensory and Consumer Research. Copenhagen, Denmark. September 2014.
- NESSI (the Network Software and Services Initiative) International Day Workshop. The purpose of this workshop is to set-up a "proposal development & consortium formation" in view of the H2020 calls closing in April 2015 with the aim to enhancing collaboration between NESSI members, other ETP members and organizations from International co-operation partner countries. Universidad Autònoma de Barcelona (UAB), Bellaterra, Barcelona, Spain. November 2014.

### Lamis Jomaa

- Developed and implemented a three-day training workshop in April 2014, in collaboration with UNICEF and the MoPH for the dissemination and optimal implementation of food-based dietary guidelines developed for Lebanese adults.
- Completed the requirements of an integrated course in Clinical Epidemiology and Biostatistics at Harvard School of Public Health (HSPH) during the month of June 2014, as part of the SHARP training program partnership between AUB and HSPH.
- Presented a talk titled "Food security in the Arab world: Assessment as a start" at the 'Exercise and Nutrition' conference hosted by NFSC and LAND on December 2, 2014.
- Presented a talk as part of a one day policy forum organized by the 'Refugee Research and Policy in the Arab World Program' at the Issam Fares Institute within the 'Public Health and Nutrition' session on May 19, 2014.

- Attended the scientific conference organized by the Canadian Obesity Network- (CON-RCO) ([www.obesitynetwork.ca](http://www.obesitynetwork.ca)) based at the University of Alberta in Edmonton, Alberta, Canada in July 2015.
- Attended the conference on 'Hidden Hunger' organized by the University of Hohenheim in Stuttgart, Germany (March 3-6, 2015).
- Submitted and received acceptance for an abstract about oral presentation at the GCHERA 2015 International Conference hosted at the University of Kaslik-USEK, Lebanon (June 25-26, 2015) entitled "Small-scale initiatives developed at a private university in Lebanon to address the Syrian refugee crisis: Do students have a role?" (Abstract will be published within the conference proceedings).
- Abstract accepted for poster presentation at the Society of Nutrition Education conference held end of July 2015 in Pennsylvania, USA. Abstract title: "Development and testing of training modules targeting health care providers for the optimal implementation of evidence-based food based dietary guidelines for Lebanese adults."

### Farah Naja

- Chaired sessions at the 5<sup>th</sup> International Breast Cancer and Nutrition Symposium. Purdue, US. October 2014.
- Chaired a session at "Nutrition and exercise for health: Emerging updates", AUB, Beirut, December 2014.
- Presented a lecture at the SHARP program AUB "Nutrition epidemiology: Challenges and new directions".
- Presented a poster entitled "Prevalence and modes of complementary and alternative medicine use among women with breast cancer in Lebanon: A cross sectional study" at the 5<sup>th</sup> International Breast Cancer and Nutrition Symposium. Purdue, US. October 2014.

### Lara Nasreddine

- Participated as a WHO temporary adviser in the technical consultation meeting entitled "Consultation on development of a draft regional nutrient profiling module", 8-10 December 2014, Tunisia.
- Oral presentation entitled "Development of a draft regional nutrient profiling module targeting children: the case of Lebanon". Technical Consultation on "Development of a draft regional nutrient profiling module", 8-10 December 2014, Tunisia.
- Oral presentation entitled "Comparative analysis of body composition assessment methods in Lebanese children: Anthropometry, bioelectrical impedance, and deuterium dilution method" for the Regional Training Course on "Assessment of body composition and total energy expenditure by stable isotope techniques", under RAS/6/080 "Preventing overweight and obesity, and promoting physical activity among children and adolescents", Kuala Lumpur, Malaysia, September 1-5, 2014.
- Oral presentation entitled "Overview of childhood obesity in the Middle East" within the framework of the above mentioned Regional Training Course, Kuala Lumpur, Malaysia.

- Oral presentation entitled “Promoting healthy eating and physical activity among school children -Intervention study”. Qatar Dietary Guidelines Launch Conference, Qatar, April 8-9, 2015.
- Oral presentation entitled “Fat intake and main dietary contributors of fat in the Eastern Mediterranean Region”. WHO Technical Consultation on ‘Salt and Fat Reduction’, Tunis, Tunisia, March, 30-31, 2015.
- Oral presentation entitled “Lebanon baseline assessment: Salt intake and main dietary contributors of salt” within the WHO Technical Consultation mentioned above.
- Oral Presentation entitled “Salt reduction initiatives in Lebanon” within the WHO Technical Consultation mentioned above.
- Oral presentation entitled “Dynamics of the nutrition transition in countries of the Eastern Mediterranean Basin” at the International Forum on ‘Food fabrication-culinary practices and food politics in the Arab world’, organized by the Goethe Institute and the Orient Institute Beirut (OIB)- Beirut, Lebanon. January 14-17, 2015.
- Oral presentation entitled “Children, ‘ObesiTV’ and food advertisements: the case of Lebanon”. Roundtable entitled “Researching children’s media worlds in a politically-charged environment”, organized by the Media and Digital Literacy Academy of Beirut (MDLAB) in partnership with the Arab Media Center at the University of Westminster, February 6, 2015. (AUB).
- Chouccair S, Naja F, Ismaeel H, Akl C and Nasreddine L, “Assessment of dietary sodium intake by a food frequency questionnaire: Validation against 24 hour urine collection”. Paper presented at the 22<sup>nd</sup> European Congress on Obesity, Prague, Czech Republic, May 6-9, 2015.
- Nasreddine L, Naja F, El-Hajj Fuleihan G., Hariri D, Hwalla N, “Vitamin D status and its association with cardiometabolic risk in a random sample of Lebanese adults”. Paper presented at the 22<sup>nd</sup> European Congress mentioned above.
- Chouccair S, Naja F, Ismaeel H, Akl C and Nasreddine L, “Assessment of sodium intake using spot urine samples: validation against 24 hour urine collection”. Paper presented at the 5<sup>th</sup> Annual Biomedical Research Day, Beirut, Lebanon. February 21, 2015.

### Omar Obeid

- Attended the Middle East and North Africa Regional workshop on ‘Sustainable prevention of iodine deficiency and achievement of optimal iodine nutrition’ held in Dubai, UAE. March, 11-13, 2015.
- Presented a talk entitled “Eat less and NEAT more” at the Arab Physical Culture Federation held in Jordan. April, 2015.
- Presented a talk entitled “Cachexia in pediatric oncology patients” at the 9<sup>th</sup> Congress of the International Society of Pediatric Oncology (SIOP) held in Jordan. April, 2015.

### Ammar Olabi

- Co-presented the Abstract- Hajj Ahmad, R., Chalak, A., Olabi, A. and I. Toufeili. “Choice of Greek style yogurt is affected by its sensory properties and the eating patterns of consumers”. Abstract presented as a poster at the 6th European Conference on Sensory & Consumer Research: EuroSense 2014, Copenhagen, September 7-10, 2014.

- Presented “Consumer trends and innovation in the beverage industry,” at the Arab Beverage Conference, September 2-3, 2014, Cairo, Egypt.
- Barakat, N., Toufeili, I., Olabi, A., Nasreddine, L., Ismail, H. and L. Abou Jaoudeh. “An assessment of sodium levels in different breads and bread intake in the Lebanese population”. Poster presented at the Institute of Food Technologists Annual Meeting, Chicago, July 11-14, 2015.
- El Labban, S., Safadi, B. and A. Olabi. “The effect of Roux-En-Y gastric bypass and sleeve gastrectomy surgery on taste acuity and sweetness acceptability in post-surgical extremely obese subjects”. Poster presented at the Institute of Food Technologists Annual Meeting mentioned above.

### Imad Toufeili

- Hajj Ahmad, R., Chalak, A., Olabi, A. Toufeili, I. “Choice of Greek style yogurt is affected by its sensory properties and the eating patterns of consumers”, presented at Eurosense 2014: A Sense of Life, Copenhagen, September 2014.
- Kalache, L., Olabi, A. and Toufeili, I. “Shelf life tracking of a ready to drink UHT chocolate milk”, presented at the Institute of Food Technologists Annual Meeting, Louisiana, June 2014.
- Kamleh, R., Olabi, A., Toufeili, I., Daroub, H., Younis, T. and Ajib, R. “The effect of partial substitution of NaCl With KCl on the physicochemical, microbiological, and sensory properties of Akkawi cheese”, presented at the Institute of Food Technologists Annual Meeting mentioned above.
- Co-presented the Abstract- Hajj Ahmad, R., Chalak, A., Olabi, A. and I. Toufeili. “Choice of Greek style yogurt is affected by its sensory properties and the eating patterns of consumers”. Abstract presented as a poster at the 6th European Conference on Sensory & Consumer Research: EuroSense 2014, Copenhagen, September 7-10, 2014.
- Speaker at the Lebanese International Nutrition Conference 2014 (LINC 2014), April 5, 2014. Title of the presentation: Gluten-Free: Is It Really?

## Consultancies

### Mohamad Abiad

- Roadster Diner, Zaatar w Zeit, Skateboard, Classic Burger: Quality and safety monitoring, including microbiological analyses of various food samples
- Sanitary Paper Co. (Mimosa), Al Kazzi Trading s.a.l: Packaging testing and quality monitoring

### Lamis Jomaa

- UNICEF-MoPH: Developed a training manual with supportive educational materials and implemented a three-day training workshop with a small team of dietitians and nutrition educators targeting a select group of primary health care providers and MoPH health coordinators.

### Nasreddine Lara

- Mapping salt and fat reduction initiatives in the WHO Eastern Mediterranean Region (WHO/EMRO) (November 2014).
- Nutrition Situation Analysis for the WHO Eastern Mediterranean Region (WHO/EMRO) (March 2014).

### Ammar Olabi

- Ammar Olabi, Imad Toufeili, "Yogurt shelf life study" for Agthia Company, Abu Dhabi. (October 2014-February 2015).

## Strategic Challenges

The following challenges were encountered during the past year:

- Scarcity of space at the department. Currently, the department is in need for:
  - Nutrition Clinic: we were not able to establish the clinic due to space limitations.
  - New offices for newly appointed faculty (Biostatistician, Clinical and sports nutrition), part-timers and staff.
  - Research Assistants offices: We currently have 11 RAs and other RAs are expected to join the team due to the launching of several new research projects. Space is a real challenge.
- Scarcity of laboratory space and laboratory equipment.
- Difficulty in conducting national or regional nutrition surveys given the unstable political situation.
- Difficulty in implementing community projects and securing internship placements for dietetic interns as part of their community nutrition rotations due to the unstable security situation in Lebanon.







# FAFS ANNUAL REPORT 2014-15

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