



American University of Beirut
Faculty of Agricultural
and Food Sciences

Annual Report

2011–12





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and Food Sciences

Annual 2011–12 Report



Preface

Dear Alumni and Friends,

It is a pleasure to share with you the 2011-2012 Faculty of Agricultural and Food Sciences (FAFS) Annual Report. This past academic year focused on setting priorities and laying the groundwork for the strategic goals which the Faculty identified the year before in its new 2012-2017 strategy. FAFS's strategic plan emphasizes four themes that address issues of local and global relevance which the Faculty will embrace in support of its mission to foster the sustainable enhancement of the health and well-being of people and nature: 1) Food Security as a Human Right, 2) Diet and Non-Communicable Disease-Treatment and Prevention, 3) Biodiversity and Urban Greening, and 4) Empowering Communities. The report highlights the major initiatives executed in line with the new strategy as well as strategic developments at the Faculty regarding teaching, research, and outreach.

The Faculty's commitment to deliver high quality education was manifested by the revision of current existing programs, introduction of new ones, and pursuit of accreditation and review of its programs. The Nutrition and Food Sciences (NFSC) Department, in line with university directives, completed a review of its five academic programs and also secured approval of its eligibility application to the Accreditation Council for Education in Nutrition and Dietetics (ACEND) and a date for a site visit. The Landscape Design and Ecosystem Management (LDEM) Department completed curricular revisions in its undergraduate program in line with the American Society of Landscape Architects (ASLA) accreditation standards and thus developed the Bachelor of Landscape Architecture (BLA) Program, which was approved by the University. Similarly, the Agricultural Sciences (AGSC) Department proceeded with a review of its undergraduate AGSC program in line with the 2012-2017 FAFS strategic plan focusing on sustainable agriculture.

In response to the Faculty's four designated global themes and moving forward towards the accomplishment of academic initiatives at the graduate level, FAFS secured with the Faculty of Medicine university approval for a new joint PhD degree in Biomedical Sciences/Nutrition and secured its registration in the state of New York. FAFS forwarded the new graduate program, Rural Community Development (RCODE) to the respective university committees for approval. In addition and in line with the Faculty's strategic goal of addressing the global concern for food security (FS) and providing resources for addressing it, FAFS moved forward with its initiative on capacity building in FS, and a roadmap was devised for the development of degree and non-degree programs in FS in collaboration with partner institutions National Council for Scientific Research (CNRS), (International Center for Agricultural Research in the Dry Areas (ICARDA), and Centre international de hautes études agronomiques méditerranéennes (CIHEAM). Moreover, the Faculty of Health Sciences was invited to participate in the development of an inter-disciplinary graduate degree in Public Health Nutrition.

In line with its strategy of strengthening important areas of research and teaching across all departments and based on the revisions of its programs, FAFS filled the following positions: assistant professors in Irrigation and Landscape Architecture and a visiting professor and visiting assistant professor in Landscape Architecture. In addition, Hilal Dbouk was appointed as the director of the Agricultural Research and Education Center (AREC) and entrusted with strengthening the partnership between FAFS and other faculties at AUB by fostering research and outreach activities at AREC.

Faculty members continued their diligent efforts to publish their research, and this year research productivity yielded a total of 103 publications in the form of refereed articles in international journals, abstracts and proceedings, and books and book chapters. During this period, faculty members secured financial support in the range of \$750, 000 US dollars from internal as well as national, regional, and international public and private institutions such as the Ministry of Agriculture (MOA), CNRS-Lebanon, the Agricultural Research Institute (ARI), and the Coca Cola Foundation. In addition, the Faculty continued its activities by organizing scientific seminars and lectures focusing on FAFS's strategic themes: food security, food safety and nutrition, and non-communicable diseases in collaboration with partners such as the Lebanese Ministry of Health, the Issam Fares Institute for Public Policy and International Affairs (IFI), the Lebanese National Council for Scientific Research, and the FAFS Alumni Chapter.

In line with FAFS's strategy to help ensure effective dissemination and marketing of solutions to urgent problems of the twenty-first century and the development of public policies informed by science, several faculty members have been involved in projects that link research with the application of knowledge to the greater community in collaboration with the Nature Conservation Center (NCC), the Center for Civic Engagement and Community Service (CCECS), and the Environment and Sustainable Development Unit (ESDU).

These initiatives and developments are spelled out in more detail in the pages that follow.

Nahla Hwalla, Dean

Faculty of Agricultural and Food Sciences

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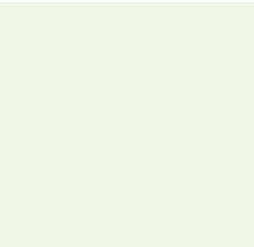
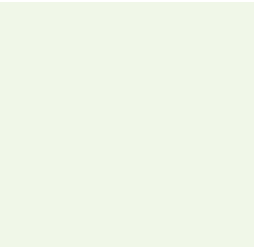
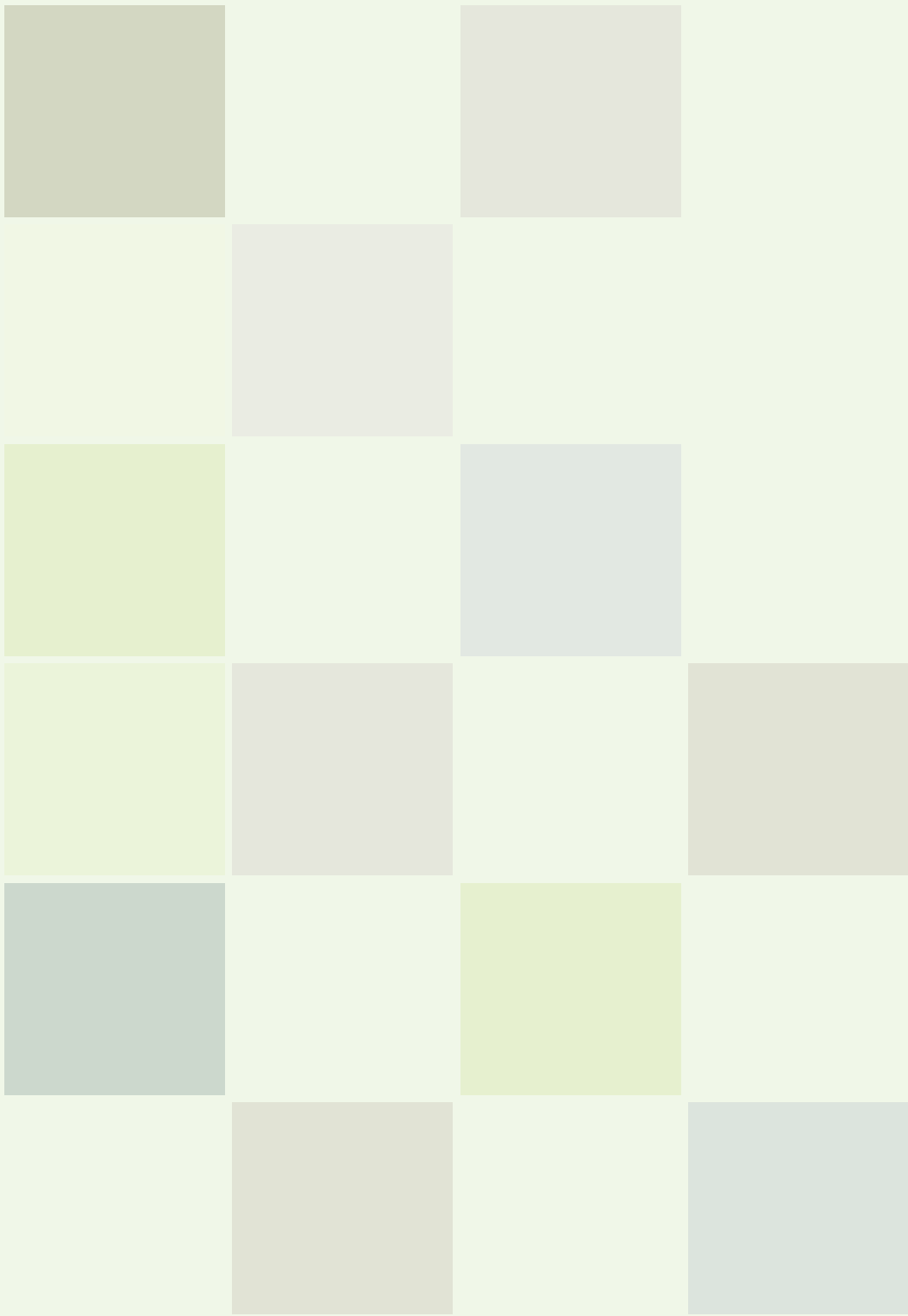
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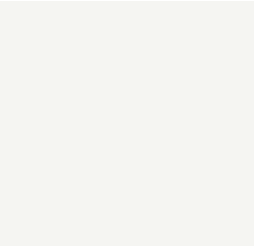
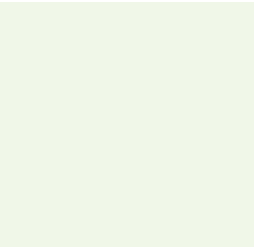
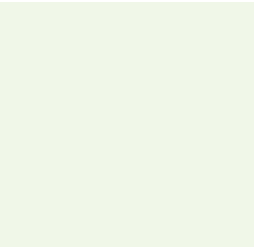
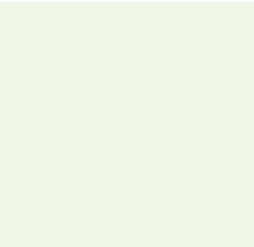
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I. Office of the Dean



A. Non-Academic Personnel

There are nine non-academic employees in the Dean's Office as per Table 1 below:

Table 1: Non-Academic Personnel

Name	Title
Al Ashi, Dania	System Administrator
Assaf, Ghina	Administrative Assistant (as of September 3, 2012)
Haddad, Tharwat	Student Record Officer
Houri, Laila	Financial Officer
Haidar, Imad	Junior Clerk
Khoury, Wafa	Executive Officer
Koubayssi, Rabia	Assistant for Student Services
Kazanedjian, Karen	Administrative Assistant (from August 15, 2011 to August 22, 2012)
Nakib, Nisreen	Secretary
Zeidan, Maya	Program Review and Accreditation Officer

B. Standing Committees

The Administrative Committee

Prepared by Maya Nabhani Zeidan, Program Review and Accreditation Officer

Membership

Nahla Hwalla, Chairperson
Jad Chaaban, Assistant Dean for Academic Affairs
Mustafa Haidar
Shady Hamadeh
Ammar Olabi
Salma Talhouk

Actions

The committee held ten meetings throughout 2011-2012 and the following actions were taken:

1. *University Promotion Procedures and Guidelines*

A draft document, "University Promotion Procedures and Guidelines," was presented to the committee members, and they were asked to review the draft and provide their input and comments on this document.

2. *Survey Templates*

FAFS Exit Survey and AREC Student Survey templates were shared with and approved by the committee members.

3. *Undergraduate and Graduate Program Coordinators*

The terms of reference for the undergraduate and graduate program coordinators were reviewed and approved.

4. *Space*

Space requirements at the Landscape and Ecosystem Management Department were discussed and assessed by the committee.

5. *On-line Student Progress Report*

The newly developed on-line Student Progress Report was discussed and committee members were briefed by the FAFSIT manager on its implementation.

6. *Capital Budget*

The committee members approved priority requests submitted by FAFS departments and AREC for the capital budget 2012–2013.

7. *Graduate Assistants*

The committee members approved the appointment of 66 graduate assistants in the various FAFS departments for the fall, spring, and summer terms.

8. *AREC*

AREC management activities were discussed and assessed.

The Advisory Committee

Prepared by Maya Nabhani Zeidan, Program Review and Accreditation Officer

Membership

Nahla Hwalla, Chairperson
Youssef Abou Jawdeh
Shady Hamadeh
Musa Nimah
Omar Obeid
Salma Talhouk
Imad Toufeili

Actions

The committee held seventeen meetings throughout the period from October 2011 to September 2012, and the following actions were taken:

1. Faculty Research Leave

Applications for seventeen short term faculty development grants, one junior faculty research leave, and thirty-seven special leaves with pay were approved.

2. New Appointments

- The committee recommended the recruitment of fifteen full-time faculty members for the academic year 2011–2012 and the fall semester 2012–2013: one assistant professor in Irrigation Engineering and Water Management in the AGSC Department, two assistant professors in Landscape Architecture in the LDEM Department, seven full-time instructors in the NFSC Department, and one instructor in the LDEM Department; two visiting professors of Landscape Architecture in the LDEM Department, one full-time lecturer in the LDEM Department, and one visiting professor of Veterinary Sciences in the Animal and Veterinary Sciences(AVSC) Department. Of these, eleven offers have been accepted, one has been declined, and three are still pending.
- Departmental recommendations for part-time faculty member recruitment were considered and the committee approved the following appointments for the academic year 2011–2012 and fall semester 2012–2013: seven in the NFSC Department; fifteen in the LDEM Department, and fifteen in the AGSC Department.
- Two preceptor associates were appointed on a non-remunerative basis in the NFSC department.
- One faculty associate was appointed in the LDEM Department.
- The committee approved the appointment of Professor Shady Hamadeh and

Associate Professor Zeina Kassaify as chairpersons of the AVSC and NFSC departments, respectively, for three years starting October 2012.

3. Renewal of Contracts

The committee approved the reappointment of three full-time faculty members in the position of assistant professor, one in the AGSC department and two in the NFSC department.

4. URB Visiting Scholars

The committee approved a departmental recommendation to invite Dr. Joan Hendricks as URB Visiting Scholar in the AVSC Department.

Academic and Curriculum Studies Committee

Prepared by Rabia Koubayssi, Assistant for Student Services

Membership

Nahla Hwalla, Chairperson
Jad Chaaban, Assistant Dean for Academic Affairs
Ali Chalak
Mustafa Haidar
Zeina Kassaify
Farah Naja
Lara Nasreddine, Undergraduate Nutrition and Deitetics (ND)/Coordinator
Ammar Olabi
Salma Talhouk
Registrar's Representative
Student Representative
Rabia Koubayssi, Secretary

Actions

The committee met ten times during the academic year 2011-2012 and the following actions were taken:

1. Approved Changing Grading of AGSC 256 (Summer Internship)

The committee approved changing the grading system of AGSC 256 (Summer Internship, 1 cr.) from P/F to a numerical grade.

2. Approved Second BS in Agriculture for Veterinary Sciences Students

The committee approved a program to offer a second BS degree in agriculture for veterinary science students. Students are required to complete a minimum of 31 additional credits with a minimum residency of two semesters.

3. *Approved Transfer Policy*

The committee approved adding in the catalogue the following statement: "Students who do not register at least 50 percent of courses required by their major in the first semester will be automatically given the status of majorless in the second semester. If, by the end of the second semester, the student does not secure acceptance in the desired major, he/she is dropped from the Faculty."

4. *Approved Dual Degree, Second Degree, Double Major, and Minor*

The committee approved the University's proposal on the revised policy for dual degree, second degree, double major, and minor.

5. *Approved Course Offerings and Introduction of New Courses*

The committee approved and modified spring, summer, and fall course offerings. It also approved the following new courses:

- AGSC 251, Vegetable Production (3 cr.), to be offered during fall 2012-2013 as an FAFS elective.
- AGSC 252, Conservation Agriculture (3 cr.).
- AGSC 219, Agriculture (3 cr.) to be offered during fall 2012-2013 as an FAFS elective.

6. *Approved Freezing the Veterinary Science Program*

The committee approved freezing the Veterinary Science Program effective fall 2012-2013 due to low enrollment and students' finding it easier to go for a DVM degree instead.

7. *Eligible Students to Go to AREC*

Ten students from the agriculture program and 23 students from the landscape program were deemed eligible to go to AREC during the spring semester of 2011-2012. Classes at AREC started on February 13, 2012.

8. *Awarding BS Degrees*

The committee recommended to the Faculty to award BS degrees to 145 students distributed as follows: 30 in Food Science and Management, 29 in Agriculture and Diploma of Ingénieur Agricole, 24 in Nutrition and Dietetics, 23 in Landscape Design and Eco-Management and Diploma of Ingénieur Agricole, 20 in Agribusiness, 18 in Nutrition and Dietetics – Coordinated Program, and one in Veterinary Science.

9. *Probation*

Based on AUB probation rules and regulations, the committee acted to drop eight students during academic year 2011-2012. Twenty students were placed on strict probation. Eight students were removed from probation.

10. *LDEM Changes in Course Requirements*

The committee approved the changes made to the current curriculum to be effective in fall 2012-2013.

11. *Proposal for Revising Grading Practices at AUB*

The committee discussed the proposal for revising grading practices at AUB and approved adopting the letter grade and aligning its grade distribution with that of US universities.

12. *LDEM Freshman Requirements*

The committee approved the modified freshman requirements to include two geology courses instead of the extra chemistry course, effective fall 2013-2014.

The Admissions Committee

Prepared by Tharwat Haddad, Student Records Officer

Membership

Nahla Hwalla, Chairperson
Mohamad Abiad
Ali Chalak
Nadim Farajalla
Mohammad Farran
Fawwak Sleiman
Jad Chaaban
Admission Representative
Registrar Representative
Student Representative
Tharwat Haddad, Secretary

Actions

The committee held two meetings during the academic year 2011-2012 and the following actions were taken:

1. *Acceptance of Transfer Students*

The committee accepted a total of 171 transfer students from other universities and within AUB according to the following distribution:

- Spring semester 2011-2012: a total of 63 transfer students of which 23 registered.
- Fall semester 2012-2013: a total of 108 transfer students of which 36 registered.

2. Acceptance of Student Applications (New and Transfer) for the Summer Semester

Based on university regulations, the committee agreed to stop considering acceptance of new as well as transfer students who apply for the summer term, effective summer 2012-2013.

3. New Applicants to Other Faculties

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

- Applicants who were not accepted in ECON (Economics) or BADM (Business Administration) will be granted acceptance in AGBU (Agribusiness major), and FSMT (Food Science and Management major) provided they satisfy the minimum required composite score and spaces in corresponding majors are available.
- Applicants who were not accepted in CHEM, BIOL, or Engineering will be granted acceptance in AGRI (Agriculture major) and VTSC (Veterinary Science major) provided they satisfy the minimum required composite score and spaces in corresponding majors are available.
- Applicants who were not accepted in CHEM or BIOL will be granted acceptance in NTDT (Nutrition and Dietetics major) provided they satisfy the minimum required composite score and spaces are available in the corresponding majors.

4. Freezing of the Veterinary Sciences Program

Based on the decision taken by the AVSC Department to freeze the Veterinary Sciences Program as of fall 2012-2013, the committee voted not to accept any transfer students into the program (Unanimous).

New students already accepted in the Veterinary Sciences program should be contacted and consulted as to whether they would like to shift to the Agriculture Program.

The Graduate Studies Committee

Prepared by Rabia Koubayssi, Assistant for Student Services

Membership

Nahla Hwalla (Chairperson)
Youssef Abou Jawdeh
Hala Ghattas
Zeina Kassaify
Farah Naja
Imad Toufeili
Admission Representative
Registrar Representative
Rabia Koubayssi (Secretary)

Actions

The committee met seven times during the academic year 2011-2012 and the following actions were taken:

1. Program of Study and Thesis Titles

The committee reviewed and approved the program of study and thesis titles of 21 students distributed as follows: 11 from NUTR, four from FTCH, two from ECOM, one from ANML, one from AGECE, one from IRRG, and one from POSC.

2. Acceptance of Graduate Students

The committee accepted 109 students out of the applicants with the graduate program in Nutrition attracting the largest number of applicants. Of the accepted candidates, 36 students were enrolled as follows: fourteen Nutrition, nine Food Technology, three Ecosystem Management, three Plant Protection, two Irrigation, two Poultry Science, one Agricultural Economics, one Plant Science, and one Animal Science.

3. RCODE

The committee approved the new graduate program: Rural Community Development (RCODE).

4. Petitions

The committee acted on 19 petitions from students, the majority of which were for transferring graduate courses which they took above their undergraduate requirements, changing status from prospective graduate to regular graduate, changing thesis title, transferring from one major to another, and changing from thesis to non-thesis program.

5. *Financial Aid Policies and Procedures for Graduate Assistantships*

The committee discussed and revised the new financial aid policies and procedures for graduate assistantships.

6. *Graduate Manual*

The committee approved the Graduate Manual prepared by the FAFS coordinator of the Graduate Studies Program.

7. *Elective Course in Food Technology*

The committee approved the recommendation of the NFSC Department to change the status of NFSC 370 (Product Development) from a core course to an elective course in the graduate program in Food Technology effective fall 2012-2013.

8. *Awarding the MS degree*

The committee recommended that the Faculty award the MS degree to 35 students in their respective majors: fifteen in Nutrition, thirteen in Food Technology, three in Ecosystem Management, two in Soil Sciences, one in Agricultural Economics and one in Plant Protection.

The Research Committee

Prepared by Isam Bashour, Professor

Membership

Yusuf Abou Jawdah, Chairperson (October 1, 2011–February 13, 2012)

Isam Bashour, Chairperson (as of February 13, 2012)

Lara Nasreddine, Secretary

Mohammad Farran

Nadim Farajalla

Omar Obeid

Actions

During the academic year 2011–2012, the Research Committee held several meetings to establish proposal evaluation guidelines and to act on received research proposals. The following actions were taken:

1. *URB Research Proposals for 2012–2013*

The committee reviewed and evaluated thirteen research proposals submitted to the URB for funding (Table 2 below). The committee also requested the evaluation of each research proposal by four reviewers according to set guidelines, and it developed and deployed an electronic reviewer evaluation form.

Out of thirteen research proposals submitted for funding by the URB, nine were approved with a total funding of \$83,630 for the academic year 2012-2013.

Table 2: Research proposals submitted to the URB for funding during AY 2012–2013

Investigator	Project title
Farah Naja	Association between Helicobacter Pylori Infection and the Metabolic Sndrome among Lebanese Adults
Hala Ghattas	Development of a Tool to Measure Food Insecurity in Children in Lebanon
Lara Nasreddine	Development and Validation of a Food Frequency Questionnaire for the Assessment of Sodium Dietary Intake in Lebanese Adults
Ali Chalak	Farmers' Willingness to Adopt Conservation Agriculture: The Case of the Beqa'a Valley
Zeina Kassayfi	Food Safety Knowledge and Practices in Domestic Kitchens in Lebanon Associated with the Level of Risk: Case Study
Imad Toufeily	Comparison of Some Selected Antioxidant Assays for Estimating Antioxidant Capacity of Honey
Elie Barbour	Development of a Highly Immunogenic Vaccine to Protect Polypeptides of Emerging H9N2-influenza Virus Mutants
Shadi Hamadeh	Survey and Quality Assessment of the Small Scale Dairy Sector in Mount Lebanon
Omar Obeid	The Assessment of Urinary Iodine Status of Children in Lebanon
Ammar Olabi	The Use of Simplesse in Low Fat Akkawi Cheese
Mohammad Abiad	Release Kinetics of Volatile Organic Compounds Stored in Metal Organic Frameworks (MOF'S) Made from Edible Ingredients
Nadim Farajallah	An Integrated Solution to the Solid Waste, Quarry Rehabilitation, and Excavation and Construction Debris Problem in Lebanon
Mustapha Haidar	Induced Resistance: An Innovative Approach for Orobanche RAMOSA Management in Potato

2. *Review of External Research Proposals*

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

Student Affairs Committee

Prepared by Dr. Zeina Kassaify, Associate Professor

Membership

Mohamad Abiad
Ali Chalak
Nadim Farajalla
Zeina Kassaify (Chairperson)
Fawwak Sleiman
Student Affairs Representative
Student Representative
Tharwat Haddad, Secretary

The committee met five times between October 1, 2011 and September 30, 2012, and voted on several items. The committee members discussed disciplinary actions and FAFS awards. The following recommendations were made to the dean:

1. Disciplinary Actions

- The FAFS Student Affairs Committee voted to refer the case of two undergraduate students to the dean for action.
- The committee agreed to dismiss the case against a graduate assistant on the basis of insufficient and invalid evidence.
- The FAFS Student Affairs Committee recommended to the dean written reprimands for six undergraduate students.

2. FAFS Awards

The committee recommended that the following students receive FAFS awards:

- Joana Haidar Award: Saline Haddad
- FAFS Alumni Award: Samia Hamati
- Edgcombe Award: Joud Shehadeh
- Kashadurian Award: Roger Mazloun
- Abdul Hadi Debs Award: Mohammad Safieddine, Soil Science
- Dean Thomas Sutherland Prize for Graduate Excellence: Rani Bassil, Soil Science.
- Penrose Award
- An email was sent to all FAFS faculty members to nominate candidates for

this award. After reviewing the records of the nominees, the committee recommended to the dean all nominees with no order of preference:

- Rawan Hammoud
- Rouba Dagher

Candidates were asked to give short presentations to the faculty members in the faculty meeting held in May 2012. The Faculty voted for Rouba Dagher.

3. AREC Day

AREC Day was held at AREC on Sunday, May 6, 2012 with the help of Drs. Haidar (Chairperson), Kassaify, Haddad, and AREC students. AREC Day 2012 was a great success with a wide range of games, multi-cuisines, and a variety of refreshments. More than 300 students and guests attended.

C. University Committees

Academic Development Committee

Prepared by Dr. Zeina Kassaify, Associate Professor

Action

The ADC approved FAFS's proposal for a revised BSc (BA) in the Landscape Design and Eco-Management (LDEM) Program.

Dr. Salma Talhouk gave a detailed presentation about the program: how it started and the rationale and reasons behind revising and making the changes to the program. She also explained the process, the new curriculum, and the choices made. In addition, she informed the committee that they are seeking accreditation for the program by the American Society for Landscape Architecture; thus, they are trying to accommodate the accreditation requirements in the revisions. After extensive discussion by the committee members, the program was approved after taking into consideration the recommendations provided by the committee.

Board of Graduate Studies

Prepared by Dr. Zeina Kassaify, Associate Professor

Action

The board approved the FAFS proposal for an MSc in Rural Community Development (R-CODE). The motion was carried unanimously.

This proposal was first brought for consideration by the BGS on February 22, 2012. A task force (May Massoud and Samir Seikaly) was formed to evaluate this proposal, resulting in specific recommendations. This feedback was forwarded for consideration by the FAFS. Consequently, a revised proposal was submitted to the BGS. The task force indicated its satisfaction with the revisions.

University Research Board

Prepared by Dr. Omar Obeid, Professor

During the academic year 2011-2012 the URB committee met twice. The purpose of the first meeting was to discuss the draft document, "University Policy and Procedures Concerning Research Misconduct," prepared by the Office of the Provost requesting feedback from the URB committee before presenting it to the senate.

The second meeting was to discuss the URB applications for fiscal year 2012-2013. Out of the thirteen research proposals submitted by FAFS to the URB for funding, only nine were approved; the total amount of funded projects was \$83,630.

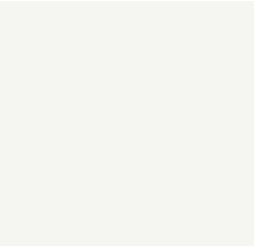
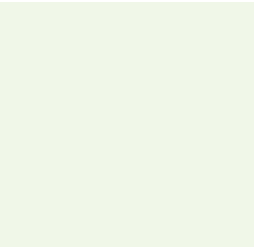
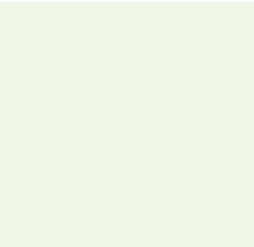
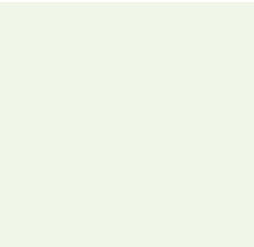
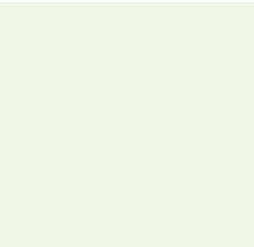
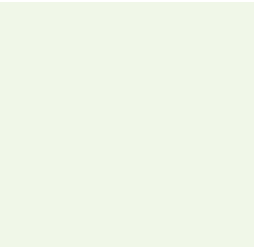
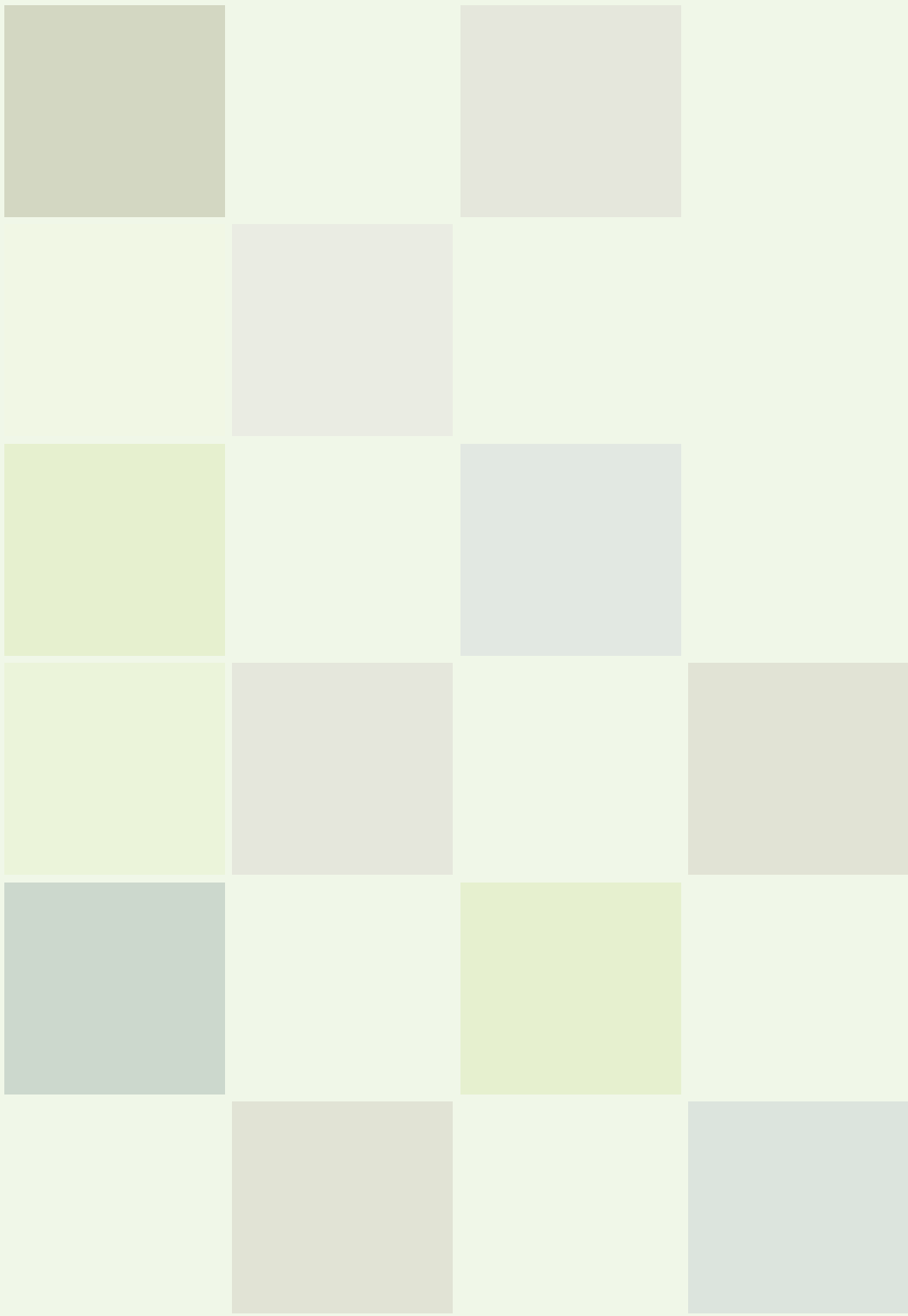
D. Fund Raising and Endowment Funds

The Abu Dhabi Alumni Chapter contributed the sum of \$100,000 to establish the Abu Dhabi Alumni Chapter Endowed Scholarship fund for FAFS students. A new endowed excellence award was established under the name, Dean Nuhaad Daghir FAFS Graduate Student Award. This award is in the amount of \$25,000. One thousand dollars will be given to the graduating student with a master's degree from the Department of Animal and Veterinary Sciences who accumulated the highest average over his/her graduate studies at AUB.

The FAFS Alumni Chapter donated \$9,750 towards the purchase of two pieces of equipment for the Animal and Veterinary Sciences and the Nutrition and Food Science Departments.

FAFS also received a donation of \$75,000 in the name of the late FAFS alumnus Dr. Nour Dajani. In consideration of this donation, the FAFS Faculty Lounge will be designated "The Nour Dajani Faculty Lounge."

The women's lounge and basketball court at AREC, renovated with the financial support of the President's Club, were inaugurated and a new tissue culture lab was established at AREC with subsidies received from the Australian Embassy.



II. The Faculty

A. Academic Matters

Faculty Recruitment and Count

The total full-time equivalents (FTE's) for fall 2011-2012 was 41.85, of which twenty-six were full-time faculty members in the professorial ranks distributed as follows: fifteen professors, one visiting professor, three associate professors, six assistant professors, and one visiting assistant professor.

- FTE (full-timers) in professorial ranks were twenty-six (seven assistant, three associate, and sixteen full professors).
- FTE (full-timers) in non-professorial ranks were eight (one senior lecturer, two lecturers, and five instructors)
- FTE (part-timers) in both professorial and non-professorial ranks were 7.85 (4.36 senior lecturers and lecturers and 4.76 instructors and assistant instructors).

Table 3: FTE by Department

		Department				
		AGSC	AVSC	LDEM	NFSC	Total
Full-time	Professorial Rank	9	4	5	8	26
	Lecturer and Instructor	1		2	5	8
Part-time		1.90	0.33	3.95	1.67	7.85
Total		11.90	4.33	10.95	14.67	41.85

In addition, a total of eight full-time research associates, senior research assistants, and research assistants were hired with university funds.

Academic Appointments

The following faculty members served as chairpersons of FAFS departments:

- Shady Hamadeh: Acting Chairperson: Animal and Veterinary Sciences Department (October 1, 2012–September 30, 2012)
- Mustafa Haidar: Agricultural Sciences Department (February 17, 2010–February 16, 2013)
- Ammar Olabi: Nutrition and Food Sciences Department (October 1, 2009–September 30, 2012)

- Salma Talhouk: Landscape Design and Ecosystem Management Department (October 1, 2011–September 30, 2014)

Appointments: FAFS advanced its recruitment activities by advertising for five professorial lines (four existing, one new) in 2011-2012. Of those, four were filled as follows: three at LDEM (of which two are visiting) and one at AGSC. Also one lecturer and one instructor were appointed at the LDEM and NFSC departments, respectively. In addition, Hilal Dbouk joined AUB as the new director of the Agricultural Research and Education Center (AREC).

Reappointments: Three faculty members were approved for reappointment in the Faculty: two in the NFSC Department and one in the AGSC Department.

Faculty Affairs

Dr. Mohamad Abiad, assistant professor in the NFSC Department, resumed his duties at FAFS as of February 15, 2012 after completion of his junior paid research leave. During the spring semester 2012, Dr. Farah Naja, assistant professor in the NFSC Department, was on junior paid research leave. Dr. Jala Makhzoumi, professor in the LDEM Department, and Nadine Mikati, instructor in the NFSC Department submitted their resignations from FAFS as of June 30, 2012 for personal reasons. Dr. Elie Barbour, professor in the AVSC Department, was on leave without pay for the spring semester.

Research Grants and Service Contracts

FAFS was successful in attracting new research and service funding from internal, local, and international funding agencies for a total \$505,924. During this fiscal year (July 1, 2011-June 30, 2012), \$93,850 of the total amount were from the URB (eleven faculty members), \$93,365 were from local funding (four faculty members), and the remaining \$318,709 from international and regional funding agencies (eight faculty members).

Renewal of the WHO Collaborating Center

In recognition of the contribution of the department of Nutrition and Food Sciences (NFSC) to the advancement of the World Health Organization (WHO) program for nutrition, WHO renewed the designation of NFSC as a "WHO Collaborating Center for Research, Training and Outreach in Food and Nutrition" for a further period of four years as of November 17, 2011.

Brown Bag Seminars

During the first semester, Dr. A. Saad presented to faculty members an overview of fifty years of plant pathology research activities and contributions in Lebanon and the region on December 16, 2011. Dr. O. Obeid presented to faculty members a presentation on the road from cachexia to obesity on January 13, 2012. During the spring semester the FAFS continued with its brown bag seminars. Dr. M. Nimah presented research done in irrigation and farm-water conservation, and Dr. I. Toufeili presented on selected food science research in the NFSC Department. The last seminar of the semester was presented by Dr. R. Zurayk on a framework for the analysis of processes at the landscape-livelihoods interface.

Visiting URB Scholars

Dr. Connie Weaver, distinguished professor in the Department of Nutrition Sciences, Purdue University, visited the Nutrition and Food Sciences Department from December 12 to 15, 2012. Dr. Weaver presented lectures to FAFS students and faculty members entitled “Vitamin D Recommendations: General Public vs Individual Treatment,” “Biomarkers Developed for Use in Experimental Nutrition,” and “Discoveries at the Food Science and Nutrition Interface.”

Dr. Joan Hendricks, dean of Veterinary Medicine at the University of Pennsylvania, has accepted the Faculty’s invitation to visit the Animal and Veterinary Sciences Department as URB Scholar during spring 2012. She presented lectures to AUB faculty members and students and discussed with AVSC faculty members modes of collaboration and cooperation.

Accreditation and Program Review

The Accreditation Council for Education in Nutrition and Dietetics (ACEND) approved the eligibility application for accreditation of the Coordinated Program in Nutrition and Dietetics and a site visit has been scheduled for the fall semester 2012-2013. The NFSC Department has also completed a program review on its five academic programs.

The LDEM Department revised its undergraduate curriculum and changed the title of the degree to “Bachelor in Landscape Architecture (BLA)” to better define the program graduates’ professional profiles in response to market needs locally and in the region.

Professor Harold Van Es, a consultant from Cornell University, reviewed and updated the Agricultural Sciences (AGSC) Program, aligning it with the FAFS strategic plan 2012-2017, focusing on sustainable agriculture. His input and feedback are currently guiding revisions of the AGSC curriculum.

The Veterinary Sciences Program has been frozen pending curriculum review, in collaboration with the Faculty of Medicine, to meet international standards.

Assessment of Learning Outcomes: Following university directives, most faculty members revised their course learning outcomes in conformity with Center for Teaching and Learning (CTL) guidelines, and FAFS departments continued the annual process of assessing the effectiveness of their individual programs on student learning.

Recognition

Dean Hwalla was recognized for her outstanding contribution to research by LNCSR during its golden jubilee ceremony at the Grand Serail on Wednesday, June 6, 2012. Dean Hwalla was recognized in the area of nutrition and non-communicable diseases.

In collaboration with the FAFS Alumni Chapter, FAFS held a gala dinner where seven distinguished graduates of FAFS were honored: Drs. Salah Abou Shakra, Thuraya Arayssi, Anwar Batikhi, Jihad Douglas, Abdul Hamid Hallab, Wafa Khoury, and Hikmat Nasr.

Professional Faculty Activities

The following FAFS faculty members received short term faculty development grants and presented papers and chaired sessions in scientific meetings: Drs. Abou Jawdeh, Bashour, Farran, Haidar, Hamadeh, Hwalla, Kassaify, Nimah, Nasreddine, Naja, Saad, and Talhouk.

Seminars and Lectures

Under the umbrella of the four global themes of FAFS, seminars and lectures were organized at the Faculty and included food security, food safety, and nutrition and non-communicable diseases.

Food Security and Food Safety: The Faculty organized and hosted lectures by renowned international scholars Drs. Jane Harrigan and Ronato Maluf, addressing food security in the MENA region. Additionally, the FAFS Alumni Chapter in coordination with FAFS hosted a conference entitled “The Lebanon Water Resources: Challenges and Opportunities” and an exhibit whereby companies from agriculture, landscape, nutrition, and food science promoted their products.

Nutrition and Non-Communicable Disease: FAFS organized a seminar for dissemination of the three year research output of the Associated Research Unit(ARU) on obesity and under-nutrition. The event was under the patronage and in the presence of H. E. the Minister of Public Health Ali Hassan Khalil.

Faculty Meetings

Prepared by Dr. A. Kantharajah, Visiting Professor

During the period October 1, 2011 to September 30, 2012, seven regular faculty meetings were held at the FAFS in which the following actions were taken:

1. *Revised LDEM BSc Degree and the New RCODE Graduate Program*

The Faculty approved the changes submitted in the LDEM BSc undergraduate program and in the title of the bachelor's degree offered by the BS in Landscape Design and Ecosystem Management to the bachelor's in Landscape Architecture (BLA). The Faculty also approved the new RCODE graduate program.

2. *Faculty By-Laws*

The Faculty approved the Unified Faculty By-laws.

3. *Voting of Degrees*

Faculty members voted unanimously to award BS degrees in agriculture and the diploma of Ingénieur Agricole, Agribusiness, Nutrition and Dietetics, the Nutrition and Dietetics-Coordinated Program, Food Science and Management, Landscape Design and Eco-Management, Veterinary Sciences, and MS for students as recommended by the representatives from each department, effective October 2011, February 2012, and June 2012 consecutively.

4. *Awards:*

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

- Edgcombe Memorial Prize: Joud Shehadeh
- Kashaduran Award: Roger Mazloun
- FAFS Alumni Award: Samia Hamati
- Joana Haidar Award: Saline Haddad
- Dean Thomas Sutherland Prizes: Rani Bassil
- Penrose Award: Rouba Dagher
- Abdul Hadi Debs Endowment: Mohammad Safieddine

B. Student Statistics

Student Enrollment (2011-2012)

The total undergraduate student enrollment in the Faculty for the year 2011-2012 was 541 distributed as follows: 117 in Agriculture, 122 in Nutrition and Dietetics, 18 in the Nutrition and Dietetics-Coordinated Program, 101 in Landscape Design and Ecosystem Management, 81 in Food Science and Management, 91 in Agribusiness, and 11 in Veterinary Science. Undergraduate enrollment in 2011-2012 slightly decreased by 4 percent with respect to year 2010-2011; the drop was in LDEM (26 percent), FSMT (26 percent), AGRI (16 percent). This decrease is possibly related to the combined effects of increase in composite scores and low yield (20 percent).

Total graduate student enrolment was 132, increased from 115 students in 2010-2011. The majority of the graduate enrolment was in the NFSC Department (97 students). Even though the NFSC department increased the admission scores, in order to decrease the burden on faculty members and to improve the quality of supervision, graduate enrollment continued to increase from 86 students in 2010-2011 to 97 in 2011-2012.

Table 4: Total Student Enrolment in Various FAFS Programs during the Academic Year 2011-2012

Undergraduate Enrollment	AY 2011-2012
Nutrition and Dietetics (NTDT)	122
Nutrition and Dietetics – Coordinated Program (NTDT-CP)*	18
Food Science and Management (FSMT)	81
Agriculture (AGRI)*	117
Agribusiness (AGBU)	91
Landscape Design and Eco-Management (LDEM)*	101
Veterinary Sciences (VTSC)	11
Total Undergraduate	541

Graduate Enrollment	
Nutrition (NUTR)	57
Food Technology (FTCH)	40
Agricultural Economics (AGEC)	4
Irrigation (IRRG)	4
Plant Protection (PLPT)	5
Plant Science (PLSC)	2
Soil Science (SOIL)	2
Animal Science (ANML)	2
Poultry Science (POSC)	3
Ecosystem Management (ECOM)	13
Total Graduate	132
Total (UG and GR)	673

* Agriculture, Landscape Design and Eco-Management and Nutrition, and the Dietetics-Coordinated Program are four-year programs.

Historical Perspective (2011-2012)

Undergraduate enrollment decreased from 607 in 2007-2008 to 541 in 2011-2012 because of raising the acceptance standards to attract and retain high quality students. FAFS increased its undergraduate average composite score from 483 in 2007-2008 to 528 in 2011-2012, which may have caused a 4 percent drop in undergraduate enrollment for year 2011-2012. Table 5 shows undergraduate enrollment over the past five years.

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

Program	07-08	08-09	09-10	10-11	11-12
NTDT	177	191	184	137	122
NTDT-CP	n.a.	n.a.	17	20	18
FSMT	154	129	111	95	81
AGRI (4 years)	156	202	177	139	117
AGBU	n.a.	6	62	55	91
LDEM (4 years)	120	104	98	109	101
VTSC	n.a.	8	9	8	11
Total Undergraduate	607	640	658	563	541

Graduate enrollment increased from 98 students in 2007-2008 to 132 in 2011-2012. This increase was mainly in the Nutrition and Food Technology programs. Table 6 shows graduate enrollment over five years.

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

Program	07-08	08-09	09-10	10-11	11-12
NUTR	44	55	61	53	57
FTCH	25	24	32	33	40
AGEC	5	3	4	6	4
IRRG	6	6	5	3	4
PLPT	8	5	5	3	5
PLSC	1	2	2	2	2
SOIL	1	3	2	2	2
ECOM	3	5	10	9	2
ANML	2	6	3	3	3
POSC	3	2	2	1	13
Total Graduate	98	111	126	115	132

Student Admissions (2011-2012)

New Undergraduate Applicants

During the academic year 2011-2012, a total of 2,053 new applications were received at FAFS, of which 32 percent were accepted and 21 percent of those accepted were enrolled. In the fall semester, the yield of admittance was 20 percent (116 out of 589 accepted students enrolled); whereas in the spring semester, the yield of admittance was 28 percent (19 out of 68 accepted students enrolled). The number of new undergraduate students enrolled was 135, an increase of 33 percent with respect to 2010-2011. This increase was due to the implementation of a new criteria: students who are not accepted in other faculties will be granted acceptances by FAFS. Table 7 shows the numbers and percentages of new undergraduate students who applied to the different FAFS majors, those who were admitted, and those who actually enrolled for the first, second, and summer semesters.

Table 7: Number of New Undergraduate Applicants Admitted and Enrolled during the Academic Year 2011-2012

First Semester 2011/2012				
Program	Applications	Admissions	Enrollment	% Yield
NTDT	398	139	24	17%
FSMT	323	69	19	28%
AGRI	333	121	28	23%
AGBU	386	143	32	22%
LDEM	312	91	9	10%
VTSC	93	26	4	15%
Total	1,845	589	116	20%
Second Semester 2011/2012				
Program	Applications	Admissions	Enrollment	% Yield
NTDT	59	30	4	13%
FSMT	27	2	1	50%
AGRI	47	14	5	36%
AGBU	37	9	4	44%
LDEM	28	13	5	38%
VTSC	10	0	0	0%
Total	208	68	19	28%

Undergraduate Transfer Applicants

During the academic year 2011-2012, a total of 387 transfer applications were received at FAFS, of which 172 (44 percent) were accepted and 58 (34 percent) of those accepted were enrolled. Table 8 shows the numbers and percentages of undergraduate transfer students who applied to the different FAFS majors, those who were admitted, and those who actually enrolled for the first, second, and summer semesters.

Table 8: Number of Undergraduates: Second Degree and Transfer Applicants Admitted and Enrolled

First Semester 2011/2012				
Program	Applications	Admissions	Enrollment	% Yield
NTDT	86	31	8	26%
FSMT	56	17	5	29%
AGRI	19	15	3	20%
AGBU	61	36	12	33%
LDEM	42	6	6	100%
VTSC	6	4	1	25%
Total	270	109	35	32%
Second Semester 2011/2012				
Program	Applications	Admissions	Enrollment	% Yield
NTDT	27	17	9	53%
FSMT	30	17	5	29%
AGRI	12	11	3	27%
AGBU	32	11	4	36%
LDEM	10	1	1	100%
VTSC	6	6	1	17%
Total	117	63	23	37%

Graduate Applicants

During the academic year 2011-2012, a total of 161 graduate applications were received at FAFS, of which 109 (68 percent) were accepted and 36 (33 percent) of those accepted were enrolled. Applications received in NUTR (71), FTCH (36) and ECOM (14) were higher than last year, 2010-2011, but there was a decline of 20 percent in FTCH. Table 9 shows the numbers and percentages of graduate students who applied to the FAFS, those who were admitted, and those who actually enrolled.

Table 9: Number of Graduate Applications and Admissions

Fall, Spring and Summer 2011-2012					
Program	Applications	Admissions	% of Applicants Admitted	Enrollment	% Yield
NUTR	71	38	54%	14	37%
FTCH	36	26	72%	9	35%
AGEC	9	7	78%	1	14%
IRRG	4	4	100%	2	50%
PLPT	7	7	100%	3	43%
PLSC	6	6	100%	1	17%
SOILS	1	1	100%	0	0%
ECOM	14	10	71%	3	30%
ANML	7	6	86%	1	17%
POSC	6	4	67%	2	50%
Total	161	109	68%	36	33%

Graduation (2011-2012)

FAFS graduated 145 undergraduate students in the fields of Food Science and Management (30), Nutrition and Dietetics (24), Nutrition and Dietetics-Coordinated Program (18), Agriculture (29), Landscape Design and Ecosystem Management (23), Agribusiness (20), and Veterinary Science (1). FAFS also graduated 35 graduate students in the fields of Nutrition (15), Food Technology (13), Ecosystem Management (3), Soil Science (2), Plant Protection (1), and Agricultural Economics (1). Tables 10 and 11 show the distribution of graduates among the different FAFS disciplines during past five years.

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

Major	07-08	08-09	09-10	10-11	11-12
NTDT	55	32	49	41	24
NTDT-CP	n.a.	n.a.	17	20	18
FSMT	40	52	26	32	30
AGRI	14	8	9	16	29
AGBU	n.a.	n.a.	1	4	20
LDEM	17	17	20	18	23
VTSC	n.a.	n.a.	n.a.	1	1
Total Undergraduate	126	109	122	132	145

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

Major	07-08	08-09	09-10	10-11	11-12
NUTR	9	12	13	16	15
FTCH	4	8	9	3	13
AGEC	3	0	1	1	1
IRRG	0	3	0	3	0
PLPT	4	2	2	0	1
PLSC	1	0	0	0	0
SOIL	0	0	0	0	2
ECOM	4	1	1	0	3
ANML	1	2	1	2	0
POSC	1	2	1	0	0
Total Graduate	27	30	28	25	35

Graduation Rate

The graduation rate is the percentage of the initial cohort who completed the requirements for the BS degree within a maximum of six years (AGRI and LDEM) and five years (NTDT and FSMT) (Table 12). Apart from a dip in 2010-2011, the graduation rate increased from 2007-2008 to 2011-2012 from 75 percent to 96 percent. In general, there was an increasing trend in the graduation rate of the FSMT (20 -51 percent) between 2008-2009 and 2011-2012. Apart from the peak in 2010-2011, the graduation rate in the LDEM exhibited a decrease from 67 to 45 percent between 2007-2008 and 2011-2012. In the AGRI program the graduation rate showed little

change (13 to 16 percent) from 2007-2008 to 2010-2011 and decreased to 7 percent in 2011-2012 (Table 12). The decrease in the graduation rate of the LDEM and AGRI might be due to the low retention rate in both majors and to the increase of composite scores in 2007-2008.

Table 12: Graduation Rate in the Last Five Academic Years

Major	07-08	08-09	09-10	10-11	11-12
NTDT	75%	79%	88%	82%	96%
FSMT		20%	58%	38%	51%
LDEM	67%	36%	29%	71%	45%
AGRI	13%	14%	11%	16%	7%

Retention Rate

The retention rate, defined as the percentage of students enrolled in the junior year from those registered in the sophomore year, is presented in Table 13. The relatively high retention rate in the NTDT program is the reflection of a high level of satisfaction with the program. In 2011-2012, a slight decrease was observed in FSMT, LDEM, AGRI, and AGBU programs as compared to 2010-2011 (Table 13). The low retention rates in the AGRI and AGBU programs might be attributed to the high rates of student transfers and low satisfaction of students with the programs.

Table 13: Retention Rate in the Last Five Academic Years

Major	07-08	08-09	09-10	10-11	11-12
NTDT	100%	83%	93%	87%	100%
FSMT	82%	63%	69%	90%	80%
LDEM	76%	58%	62%	91%	71%
AGRI	42%	57%	47%	48%	41%
AGBU				39%	33%

C. Centers and Units

Agricultural Research and Education Center (AREC)

Prepared by Nicolas El Haddad, AREC Farm and Facilities Manager

Support Staff

AREC Administration	
El-Haddad, Nicolas	Farm and Facilities Manager
Yazbeck, Mirna	Secretary
Hajj Hasan, Hussein	Sales Attendant/Store Keeper
Yazbeck, Bilal	Driver/Purchaser

AREC Physical Plant	
Ghosn, Hisham	Gateman/Watchman
Haidar, Naji	Assistant Mechanic
Hajj Hasan, Fuad	Boiler Operator/Pipe Fitter
Hajj Hasan, Ali G.	Gateman/Watchman
Hajj Hasan, Khayrieh	Maid
Hajj Hasan, Mohamad	Gateman/Watchman
Hajj Hasan, Shehadeh	Janitor
Kak, Mohamad	Gateman/Watchman
Masri, Ali	Gateman/Watchman
Mouna, Hasan	Day and/or Night Attendant
Mussawi, Kuzhayyah	Gateman/Watchman
Nasser, Haidar	Janitor
Rumeh, Abdel-Karim	Farm Attendant
Sindian, Ali	Head Mechanic
Zein, Bassam	Mason

AREC Production	
Abou Eid, Abdallah	Field Worker
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
Kayyal, Hatem	Agronomy Foreman
Mussawi, Abbas	Machine Operator
Safar, Shady	Livestock and Poultry Production Supervisor
Takesh, Nayef	Machine Operator
Yazbeck, Ali	Assistant Agronomy Foreman
Yazbeck, Hussein	Animal Attendant
Zureik, Mohamad	Poultry Production Head

AREC Cafeteria	
Hamiyeh, Walid	Cook
Kayyal, Ali	Food Service Worker
Shukr, Khalil	Food Service Worker

AREC Library	
Sleiman, Samar	Library Assistant II

AREC Clinic	
Sayyed Ahmad, Mariam	Staff Nurse

AREC Activities

AREC facilitates faculty teaching, research, and various service activities as follows:

Administration

Hilal Dbouk was appointed AREC director as of September 1, 2012. He will bring to AREC innovative business plans, regional connections, fund-raising, and a unique identity both locally and regionally. Director Dbouk will strengthen the partnership between FAFS and other faculties at AUB by fostering research and outreach activities at AREC.

Teaching

During the spring and summer semesters, a total of thirty-three students spent their spring and summer sessions at AREC (10 AGR III and 23 LDEM III). AREC staff continued to assist students in their master's projects about traceability, collecting data and samples from the cows and milking area as well as the creamery, also acquainting the students with the different practical farm operations on a daily basis.

Partnerships

In line with FAFS strategy to integrate AREC as an AUB facility, a strategic partnership has been established with the Energy Research Group (ERG) at the Faculty of Engineering and Architecture whereby mechanical engineering students under the supervision of Dr. Nisrine Ghaddar will be conducting a project on renewable energy at AREC.

Also an agreement was signed with the AUB Medical Center (AUBMC) whereby AREC will supply AUBMC with its needs in dairy products.

The strategic partnership between FAFS and USAID has been revisited and an invitation was extended to the USAID team, headed by Dr. Jim Barnhart, to visit AREC. The visit took place on January 4, 2012 in the presence of selected FAFS faculty whereby the team inspected the facilities at AREC for possible collaboration on community outreach programs.

Collaboration

In line with FAFS strategy to promote AREC as a center for research and community development, AREC hosted an ACDI/VOCA team headed by Dr. Cynthia Steen (Chief of Party-ACDI/VOCA), who met with Drs. Haidar and Bashour of FAFS to discuss the possibility of establishing an outreach program at AREC for community development focusing on three areas: sustainable agriculture, rural entrepreneurship, and human development.

Also, AREC hosted a team from the Kingdom of Saudi Arabia (KSA) headed by Dr. Saad Khalil Bin Essa (KSA Ministry of Agriculture) to plan for future cooperation and collaboration on organic farming between KSA and AUB. The team met with Drs. Haidar, Bashour, and Kantharajah of FAFS.

Infrastructure

With the financial support of the President's Club, the women's lounge and basketball court at AREC were renovated. An inauguration ceremony was held on October 30, 2011 in the presence of President Dorman, VP May, and members of the President's Club and the FAFS faculty.

Facilities

A new tissue culture lab was established at AREC with subsidies received from the Australian Embassy.

Staff Development

AREC cafeteria and production personnel underwent training on food safety and service.

The Environment and Sustainable Development Unit (ESDU)

Prepared by Drs. Shadi Hamadeh and Salwa Tohmé Tawak

Personnel

Shadi Hamadeh, ESDU Director

Diana Abi-Said, Administrative-Financial Officer

Mounir Abi-Said, Training and Organizational Development Specialist

Ziad Moussa, Capacity Development and Outreach Officer

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

Highlights of ESDU activities during 2011-2012

During the academic year 2011–2012, ESDU implemented several projects covering a budget of \$80,000 from different international donor agencies, mainly the Food and Agriculture Organization of the United Nations (FAO), the Resource Centers on Urban Agriculture and Food Security Foundation (RUAF) based in the Netherlands, the International Development Research Centre (IDRC), and Georgetown University, Washington, DC through its Center for International and Regional Studies in Doha, Qatar.

Regional Networking and Communication for Development

- “Communication for Development Portal”
- The ESDU relaunched the regional ComDev Portal (<http://www.comdev-neareast.org/web/main.php> Under construction) which was initiated in 2007 to link extension services in the Near East and their National Agricultural Research and Extension Services and support their capacities to play dynamic roles in agricultural innovation at the local and regional level. The regional portal provides a good platform for regional networking and interaction and shares learning to enhance regional collaboration in this field.

- “Urban Agriculture Magazine and Website”
- As the seventh center of Urban Agriculture under the RUAF Foundation (www.ruaf.org), ESDU has been publishing the *Arabic Urban Agriculture Magazine*. The latest issue, number 13, “From Seed to Table: Developing Urban Agriculture Value Chains,” is found on the website (www.urbanagriculture-mena.org), which is regularly managed and updated by the ESDU.

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

This project is funded by the IDRC and provides capacity development, small R and 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 a MENA Development Evaluation Association (“valMENA”). The project held its second annual meeting in Beirut in July 2012 and brought together 24 evaluation practitioners from Egypt, Jordan, Lebanon, Morocco, and Saudi Arabia. Furthermore, and through linkages with the American and Australian evaluation associations as well as UNICEF, the project was able to offer high-level professional development workshops to Lebanese development practitioners. The project hosted the kick-off meeting of the newly launched global initiative, “EvalPartners” (International Evaluation Partnership for Strengthening Civil Society Evaluation Capacities), with 21 evaluation leaders from 15 countries representing international organizations and regional evaluation networks that are partners in the initiative.

Research Study: “Urban Agriculture and Food Security in the Middle Eastern Context: A Case Study from Lebanon and Jordan”

This study initiated in 2011 and funded by Georgetown University, Washington, DC, through its Center for International and Regional Studies at its campus in Doha, Qatar, assessed existing urban agriculture activities in two low-income towns in Lebanon and Jordan respectively. Research results were presented and discussed in two workshops at the Georgetown University Center in Qatar. The research will be published by the center as a chapter in the book, Food Security and Food Sovereignty in the Middle East.

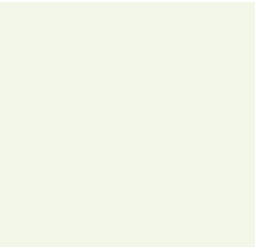
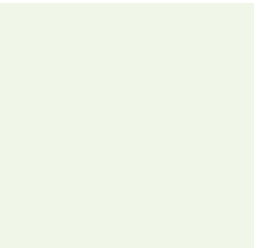
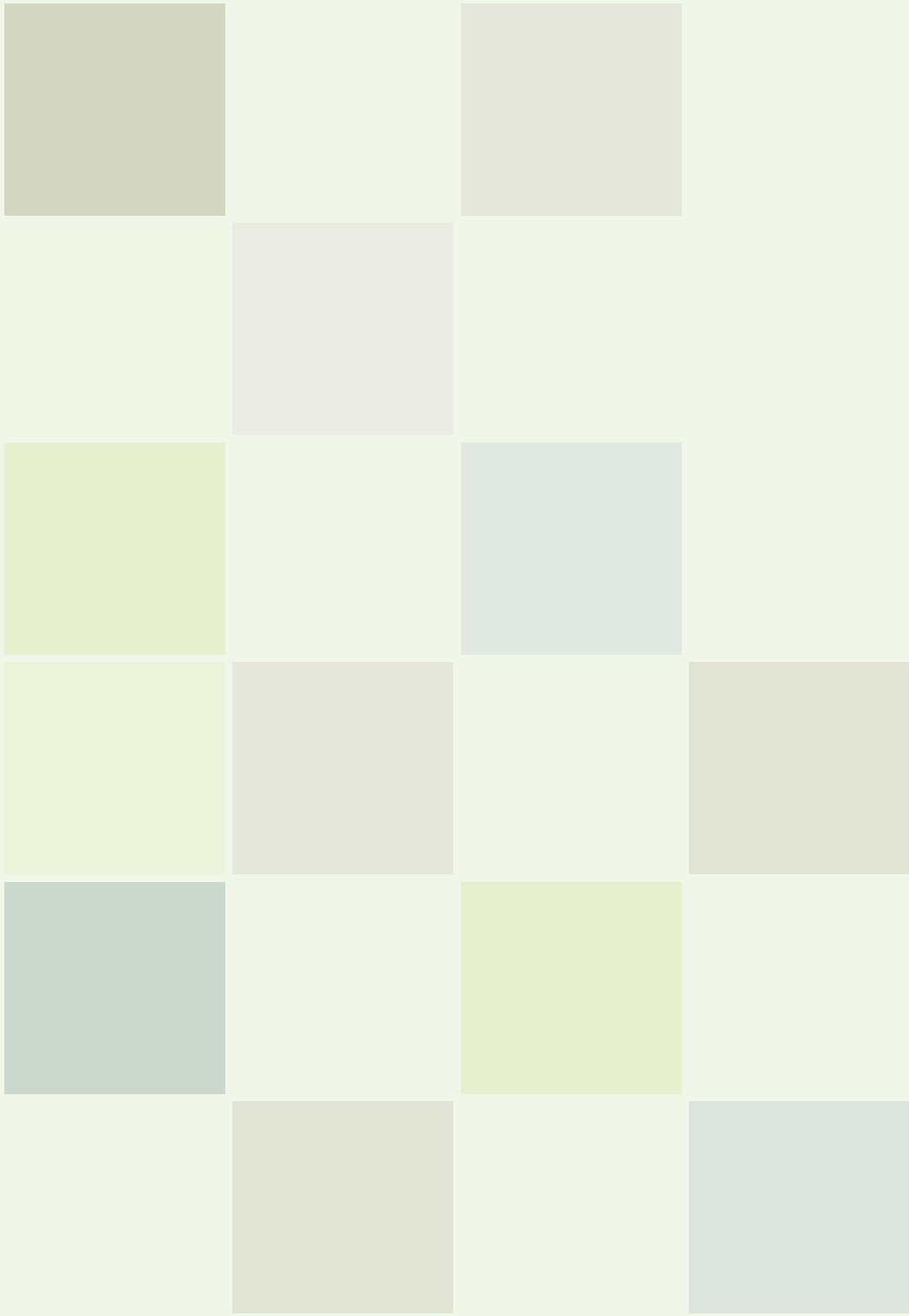
New Academic Program: “The RCODE Master of Sciences Program in Rural and Community Development”

The RCODE Program, initially developed in 2003, was updated and approved by the Faculty of Agricultural and Food Sciences. Its final approval by the AUB administration is expected in 2013.

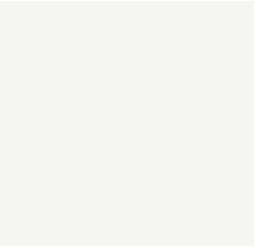
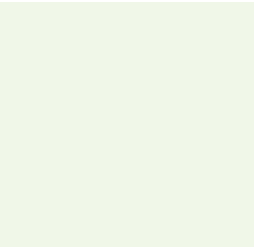
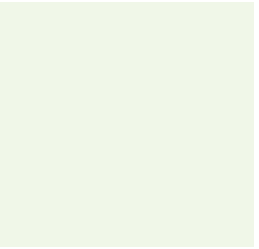
Community Development, a New Project: “Promotion of Organic and Local Healthy Products through a Weekly Farmers’ Market”

The project, funded by Majed Al Futtain Properties, Lebanon, under the “Waterfront City Social Responsibility Initiative,” started in September 2012. This project aims to establish a weekly farmers’ market to promote organically produced goods in the Metn and Kesrwan areas and to build links between residents and local producers. In addition, a series of training sessions will teach small-scale producers about organizational and managerial skills and business planning and financing to sustain the market.

In 2012, the ESDU was allocated for the first time since its establishment an official AUB account for a total budget of \$20,000.



III. Departmental Reports



A. Department of Agricultural Sciences

Prepared by Dr. Mustapha Haidar, AGSC Chairperson and Rami El-Husseini, AGSC Departmental Research Assistant

Highlights

Agriculture Program

The department is in the process of revising the Agriculture Program curriculum to be aligned with department, faculty, and university goals. After a marathon of meetings with staff, students, and faculty members at FAFS, Harold Van Es, professor of soil and water management at Cornell University, was invited as a consultant to assist the department in this mission. Two retreats were held last spring to that effect. The plan is to adopt a sustainable agriculture system in teaching, research, and community services. As a first step, the department introduced three new undergraduate courses: Conservation Agriculture, Vegetable Production and Plant Tissue Culture, and Crop Improvement (Graduate).

Agribusiness Program (AGBU)

The Ministry of Education and Higher Education has approved granting a diploma of Ingénieur Agricole to agribusiness students who accumulate a total of no fewer than 135 credits and four academic years at the University by successfully completing 45 additional credits on top of the 96 credits required for completion of the Agribusiness Program at FAFS.

New Faculty

The department recruited Hadi Jaafar as assistant professor of Irrigation and Water management effective September 2012. The department is in the process of recruiting full time faculty members in Agribusiness Marketing and Management and Horticulture. Both positions have been advertised.

Department Outreach Activities

AGSC faculty members provided outreach service activities through training the trainers and training the Lebanese farmers at AREC and other regions of Lebanon. The department was involved in the application of conservation agriculture (no-till) system into AREC, and around 20,000 dunums in different regions of Lebanon. Furthermore, Dr. Haidar, along with ten agriculture students, travelled to Jordan and participated in the summer school on promoting conservation agriculture in the Arab World. Around 60 students and professors from Jordan, Syria, and Germany participated in the summer school. Faculty members and students also participated

in the workshop, "Gender Barriers towards Employment Impact in Conservation Agriculture," in Amman, Jordan. Both activities were funded by the German Academic Exchange Service (DAAD).

The on-going establishment of a Field Germplasm Bank, in the form of a botanical garden for plant conservation at AREC is one of the other achievements of the department. The project is funded by the Australian Embassy and is projected to add functionality and scenery at the Beqa'a campus, which boasts a good record of leisure and AUB community activity.

The Agribusiness Society celebrated Mother's Day in a special way by organizing the Spring Festival. This festivity was held in collaboration with all FAFS societies.

Drs. Bashour and Nimah provided technical advice to INMA in Sudan on corn production. During the summer, Dr. Bashour provided technical assistance (consultancy) for the Kafaa agricultural project in Sudan and the Tushka agricultural project in Egypt on alfalfa and wheat production. He also provided advice on fertilization of different field crops and dates to several agricultural projects in Saudi Arabia. In cooperation with Debbaneh's technical staff, Dr. Bashour advised several potato producing farms in Lebanon on proper fertilization programs.

Hands-On Experience

Agriculture students received special attention and were provided with an opportunity to obtain hands-on learning experiences (Experiential Learning Model) through organic agriculture courses in Beirut and other courses at AREC. Furthermore, students in Beirut or at AREC had the chance to work with the private sector such as the AMC and Unifert; they also visited the surrounding AREC community.

Personnel

The AGSC department has eight full-time faculty members, one visiting professor, one full-time senior lecturer, seven part-time faculty members (total FTE:11.92 based on first semester data), two senior research assistants (one on research grant), one full time research assistant, and four part-time research assistants appointed on research grant. Seven graduate assistants were appointed for the fall, spring, and summer semesters.

The tables below detail the personnel in the Agricultural Sciences Department:

Full-time Faculty

Mustapha Haidar	Professor, Chairperson
Youssef Abou Jawdeh	Professor
Isam Bashour	Professor
Jad Chaaban	Assistant Professor
Ali Chalak	Assistant Professor
Arumugam Kantharajah	Visiting Professor
Musa Nimah	Professor
Adib Saad	Professor
Sui Kwong Yau	Professor
Hala Chahine	Senior Lecturer

Part-time Faculty

Efat Abou Fakhr Hammad	Senior Lecturer
Youssef El Khalil	Lecturer
Boutros Madani	Instructor
Hashem El Hussein	Instructor
Maysaa El Harakeh	Instructor
Rami Ollaik	Instructor
Youssef Doughan	Instructor
Mohamd El Zein	Instructor

Research Assistants

Lucia Hanna	Senior Research Assistant
Hana Sobh	Senior Research Assistant (on grant)
Rami El Hussein	Departmental Research Assistant
Dima Krayem	Research Assistant (on grant)
Annibelle Sassine	Research Assistant (on grant)
Maan Jawhari	Research Assistant (on grant)
Jamil Samsatly	Research Assistant (on grant)

Graduate Assistants

Ali Abdelsater	Fall 2011, Spring 2012
Mohamad Ali Khalife	Summer 2012
Pardie Karamanoukian	Fall 2011, Spring 2012
Rewa El Seblani	Fall 2011, Spring 2012
Jessica El Asmar	Fall 2011, Spring 2012
Alexandra Irani	Fall 2011, Spring 2012
Aiman Sleiman	Fall 2011, Spring 2012

Teaching

Student Enrollment in Courses

Fall 2011–12 Undergraduate

Course	Credits	Enrollment	Instructor(s)
AGSC 201	2.0	16	A. Saad
AGSC 204	1.5	26	R. El Zein
AGSC 204	1.5	26	M. El Harakeh
AGSC 211	3.0	21	A. Chalak
AGSC 212	1.0	38	Y. Doughan
AGSC 212	2.0	38	Y. El Khalil
AGSC 213	3.0	10	R. El Hussein
AGSC 215	3.0	15	I. Bashour
AGSC 220	2.0	14	M. Haidar
AGSC 220	1.0	14	M. El Zein
AGSC 221	3.0	23	E. Abou Fakhr
AGSC 232	3.0	15	Y. Abou Jawdeh
AGSC 236	3.0	24	H. Chahine
AGSC 235	2.0	21	S. Tawk
AGSC 239	0.0	25	H. Chahine
AGSC 240	0.0	26	H. Chahine
AGSC 241	1.0	13	Y. Doughan
AGSC 241	2.0	13	Y. El Khalil
AGSC 248	3.0	23	H. Chahine

Course	Credits	Enrollment	Instructor(s)
AGSC 262	3.0	9	M. Nimah
AGSC 288	3.0	13	R. Ollaik
AGSC 292	5.0	2	A. Chalak
AGSC 296	1.0	10	A. Saad

Fall 2011-12 Graduate

Course	Credits	Enrollment	Instructor(s)
AGSC 301	1.5	12	A. Chalak
AGSC 307	3.0	2	S.K. Yau
AGSC 308	3.0	2	A. Kant
AGSC 311	3.0	3	Y. Abou Jawdeh
AGSC 324	3.0	3	I. Bashour
AGSC 328	3.0	3	M. Nimah
AGSC 377	3.0	7	J. Chaaban

Spring 2011-12 Undergraduate

Course	Credits	Enrollment	Instructor
AGSC 201	2.0	29	A. Saad
AGSC 202	1.5	16	I. Bashour
AGSC 202	1.5	16	M. Nimah
AGSC 203	1.0	25	S.K.. Yau
AGSC 203	1.0	25	Y. Abou Jawdeh
AGSC 203	1.0	25	E. Abou Fakhr
AGSC 210	3.0	17	H. Chahine
AGSC 212	2.0	56	Y. El Khalil
AGSC 212	1.0	56	Y. Doughan
AGSC 213	3.0	13	R. El Housseini
AGSC 222	0.25	10	S.K. Kant
AGSC 222	0.25	10	S.K. Yau
AGSC 222	1.0	10	M. Haidar
AGSC 224	3.0	10	A. Kant
AGSC 225	3.0	10	S. Tawk
AGSC 228	3.0	10	H. Jaafar

Course	Credits	Enrollment	Instructor
AGSC 229	3.0	9	B. Madani
AGSC 231	3.0	10	S.K. Yau
AGSC 240	0	20	H. Chahine
AGSC 250	3.0	12	A. Kant
AGSC 253	3.0	14	H. Chahine
AGSC 255	3.0	10	J. Chaaban
AGSC 265	3.0	24	I. Bashour
AGSC 284	3.0	10	M. Haidar
AGSC 288	3.0	25	R. Ollaik
AGSC 292	2.0	21	H. Chahine
AGSC 292	3.0	21	M. Abou Nassar
AGSC 295	3.0	7	Y. Abou Jawdeh
AGSC 296	1.0	17	A. Saad

Spring 2011-12 Graduate

Course	Credits	Enrollment	Instructor
AGSC 301	1.5	8	A. Chalak
AGSC 322	3.0	3	A. Saad
AGSC 326	3.0	2	M. Nimah
AGSC 376	3.0	2	A. Chalak
AGSC 389	3.0	2	A. Chalak
AGSC 395	1.0	2	S.K. Yau

Summer 2011-12

Course	Credits	Enrollment	Instructor
AGSC 226	3.0	10	A. Najm
AGSC 229	3.0	5	M. Bou Nassar
AGSC 256	1.0	19	H. Chahine
AGSC 328	3.0	1	M. Nimah

Completed Theses

- Jamil Hanna Samsatly, Professor Youssef Abou Jawdah (Adviser): Development of Serological and Molecular Techniques for the Detection of Potato Viral Diseases, 2011.
- Mohamad Zeid Safieddine, Professor Isam Bashour (Adviser): Potassium Availability in Selected Lebanese Soils, 2012.
- Rani Joseph Bassil, Professor Isam Bashour (Adviser): Antibiotic Uptake by Plants from Manure-Amended Soil, 2012.
- Souhad Abou Zaki, Assistant Professor Jad Chaaban (Adviser): The Impact of Rising Food Prices on Household Food Security in Micro Nutrient Intakes in Lebanon, 2012.
- Mohamad Ali Hisham Khalife, Professor Youssef Abou Jawdah (Adviser): Deficit Irrigation Based on Drought Tolerance in Tomato Varieties, 2012.

Research Funding

Internal Grants

University Research Board (URB)

Three members of the AGSC Department received URB funds as below:

- Chaaban, Jad. The Efficiency of Food Labeling as a Rural Development Policy: The Case of Olive Oil in Lebanon.
- Chalak, Ali. How Effective are Environmental and Health Labels at Capturing Market Share? The Case of “Zero Nitrate” Labels in the Lebanese Market for Bottled Water.
- Nimah, Musa. Deficit Supplemental Irrigation Impact on Safflower Yield under Semi-Arid Climate.

Local, Regional, and International Grants

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

- Abou Jawdah, Youssef. Production of Biodiesel from Algae in Selected Mediterranean Countries. European Union-European Neighborhood and Partnership Instrument (ENPI).
- Abou Jawdah, Youssef. Control of New Threatening Cucurbit-infecting Whitefly-Transmitted Geminiviruses in the Middle-East. Al-Balqaa University, Jordan.

- Abou Jawdah, Youssef. Diagnostic Analysis of Phytoplasma Disease on Stone Fruits (Candidatus Phytoplasma phoenicium). Lebanese Ministry of Agriculture.
- Bashour, Issam. Effect of Hydrogel on Water-Holding Capacity of Soils, and Growth of Trees in Lebanon. Lebanese Reforestation Initiative (LRI).
- Chaaban, Jad. Mapping the Living Conditions of UNHCR Registered Refugees in Lebanon. United Nations High Commissioner for Refugees (UNHCR).
- Chaaban, Jad. Industrial Organization of Fresh Value Chains in the Middle East: Two Case Studies from Lebanon and Qatar. Georgetown University Center for International and Regional Studies, Food Security, and Food Sovereignty in the Middle East.
- Kantharajah, A. S. In Situ and in Vitro Plant Propagation and Germplasm Conservation of Agricultural and Endangered Forest Species in Lebanon. The Crowford Fund.
- Kantharajah, A. S. and M. Haidar. Establishment of a “Field Germplasm Bank” in the Form of a Botanical Garden for Plant Conservation in the Beq’aa Valley, Lebanon. Australian Direct Aid Program (DAP).
- Chalak, Ali. Consumers’ Demand for Mitigating Foodborne Risks and the Role of Awareness Campaigns in Adding Value to Microbiological Safety in Food Markets of Lebanon. Lebanese National Council for Scientific Research (LNCSR).
- Yau, Sui Kwong. Early Sowing and Irrigation to Increase Crop Yield in Arid Areas – Phase I, Lebanese National Council for Scientific Research (LNCSR).

Publications

Internationally Refereed Journals

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

- Molino Lova, M., Quaglino, F., Abou-Jawdah, Y., Choueiri E., Sobh, H., Alma, A., Tedeschi, R., Casati, P., Bianco, P. 2011. Identification of new 16SrIX subgroups, rIX-F, and rIX-G, among “Candidatus Phytoplasma phoenicium”-related strains infecting almond, peach, and nectarine in Lebanon. *Phytopathologia Mediterranea* 50: 273–282.
- Molino Lova, M., Quaglino, F., Abou-Jawdah, Y., Choueiri, E., Sobh, H., Alma, A., Tedeschi, R. M., Casati, P., Bianco, P. A. 2011. “Candidatus

Phytoplasma phoenicium"-related strains infecting almond, peach and nectarine in Lebanon. Bulletin of Insectology 64: 267-268.

- Abou Jawdah, Y., Choueiri, E., Bianco, P., Molino Lova, M., Hajj-Hassan, S., Al Achi, R. 2011. Almond witches' broom phytoplasma: situation in Lebanon. Phytopathogenic Mollicutes 1 (2): 99-100.
- Sobh, H.*, Samsatly, J., Jawhari, M., Najjar, C., Haidar, A., Abou-Jawdah, Y. 2012. First report of squash leaf curl virus in cucurbits in Lebanon. Plant Disease 96: 1231.
- Hanafi S., Chaaban J., and Seyfert K., "Social Exclusion of Palestinian Refugees in Lebanon: Reflections on the Mechanisms that Cement their Persistent Poverty," Refugee Survey Quarterly (2012) 31(1): 34-53. Republished in Arabic in Majallat al-Dirasat al-Filastiniyah, No. 91, Summer 2012.
- Salti N. and Chaaban J., "The Political Economy of Attracting Public Funds: The Case of Lebanon," International Journal of Development and Conflict 02, 1250001 (2012).
- Abrahamian P. and Kantharajah A. (2011), Effect of vitamins on vitro organogenesis of plants. American Journal of Plant Sciences, 2,669-674.
- Chalak, A. and Abiad, M. (2012). "How effective is information provision in shaping food safety related purchasing decisions? Evidence from a Choice Experiment in Lebanon." Food Quality and Preference 26(1): 81-92.
- Chalak, A., Hecht, J., Reid, S., and Abiad, M. (2012). "Willingness-to-pay for greenhouse gas reductions: A Bayesian investigation of distributional patterns." Environmental Science and Policy 19-20: 147-157.
- Haidar M. A. 2011. Carotenoids and Chlorophyll are Not the Chromophores of Blue Light-Induced Prehaustoria in Dodder (Cuscuta campestris) Seedlings." Journal of Agricultural Science and Technology B 1(3): 323-330.
- Abdul-Rahman, S., Saoud, I. P., Owaied M.K., Hanafy H., Farajalla N. , Haidar M., and Ghanawi J. (2011). Integrated Aquaculture/Agriculture Increases Vegetal Crop Growth and Yield, and Improves Water Use Efficiency in Semi-Arid Regions. Journal of Applied Aquaculture. 23:212-230.
- Yau, S. K. and J. Ryan. (2012) "Does growing safflower before barley reduce barley yields under Mediterranean conditions?" Agronomy Journal, 104: 1493-1500.
- Yau, S. K. (2012) Previous-crop effects on safflower (Carthamus tinctorius L.) in a semi-arid Mediterranean area. Journal of Oilseeds Research 29 (special issue): 193-197.

Book Articles or Chapters

- Bouamra-Mechemache, Z. and Chaaban, J., "Is the Protected Designation of Origin (PDO) Policy Successful in Sustaining Rural Employment?" In F. Arfini, M. Mancini, and M. Donati (eds), Local Agri-food Systems in a Global World: Market, Social and Environmental Challenges, Cambridge Scholars Publishing, 2012 (ISBN 978-1-4438-3664-7).
- Kantharajah, A. S. and P. G. Golegaonkar (2011), Study on invitro culture and cryopreservation of banana passion fruit (Passiflora mollissima). Experimental Phytochemical techniques. Professor N. Raman ed. (ISBN 9380235941).
- Yau, S. K. (2012) Safflower cropping system: vision for the future. In Murthy, I.Y.L.N., Basappa, H., Varaprasad, K. S. and Padmavathi, P. (eds.) Safflower Research and Development in the World: Status and Strategies. Indian Society of Oilseeds Research, Directorate of Oilseeds Research, Rajendranagar, Hyderabad, India. pp. 65-81.

Abstracts and Conference Proceedings

- Abou Jawdah Y., Choueiri E., Bianco, P., Molino-Lova, M., Hajj-Hassan S., Al Achi, R. 2011. Almond witches'-broom phytoplasma: Situation in Lebanon and action of the Ministry of Agriculture for the disease eradication during the 2010-2011 seasons. Book of Abstracts, pages 19-20. COST Action FA0807 workshop: Emerging phytoplasma diseases of stone fruits and other crops and their possible impact on EU countries. Istanbul Turkey, December 1-2, 2011.
- Molino-Lova, M., Mahfoud, C., Abou Jawdah, Y., Choueiri, E., Abdul-Nour, H., Fakr, R., Al Achi, R., Alma A., Picciau, L., Bianco, P. A. 2011. Results of last surveys for stone fruit phytoplasma disease management in Lebanon. Book of Abstracts, pp. 17-19. COST Action FA0807 workshop: Emerging phytoplasma diseases of stone fruits and other crops and their possible impact on EU countries. Istanbul, Turkey, December 1-2, 2011.
- Abou-Jawdah, Y., Molino Lova, M., Bianco P., Choueiri E., Fakhr R., Hajj-Hassan S., Haydar L., Al Achi R. 2012. Almond witches' broom phytoplasma, officially declared as a regulated pest in Lebanon. Book of Abstracts, p. 107. The 22nd International Conference on Virus and Other Transmissible Diseases of Fruit Crops (ICVF), Rome, Italy, June 3-8, 2012.
- Haidar M. A. and Sabra A. 2012. Invasive weeds of Lebanon. Proceedings 65th Meeting of Western Society of Weed Science, Reno, USA (Abstract 78).
- A. T. Saad, M. Temsah, L. T. Hanna. 2012. First report of Cryphonectria parasitica on chestnut in Lebanon.

- Yau, S.K. (2012) Safflower cropping system: Vision for the future. In the 8th International Safflower Conference, Jan 19-23, 2012, Hyderabad, India. (Invited plenary presentation)
- Yau, S.K. (2012) Previous-crop effects on safflower in a semi-arid Mediterranean area. In the 8th International Safflower Conference, Jan 19-23, 2012, Hyderabad, India.
- Yau, S.K. and M.T. Farran (2012) Country report on safflower – Lebanon. In the 8th International Safflower Conference, Jan 19-23, 2012, Hyderabad, India. pp. 171-172.
- Yau, S.K. (2011) Evaluation of the team-based learning technique versus conventional lecturing. The 2nd International Conference on Effective Teaching and Learning in Higher Education, Dec 9-10, 2011, Beirut, Lebanon.
- Yau, S.K., I. Bashour, and N. Haddad (2011) Stubble management effects on barley and vetch yield after zero tillage in Mediterranean climate. In Abstracts (CD format) of the International Annual Meeting of the American Society of Agronomy, Crop Science Society of America, and Soil Science Society of America, October 16 - 19, 2011, San Antonio, Texas, USA.

Services

Youssef Abou Jawdeh

AUB

- Member of the FAFS Advisory Committee
- Member of the FAFS Graduate Studies Committee

Others

- Member of the Pesticide Legislation Committee, Ministry of Agriculture
- Member of the Pesticide Scientific Committee, Ministry of Agriculture
- Member of Phytoplasma Management Committee, Ministry of Agriculture
- Member of the Vegetable Committee, Ministry of Agriculture
- Board member 2011-2013. Mediterranean Phytopathological Union (MPU), Italy
- Member of the American Phytopathological Society, USA.
- Member of the Arab Society for Plant Protection, Beirut, Lebanon

- Member of European Union COST Action FA0807: Integrated Management of Phytoplasma Epidemics in Different Crop Systems
- Member of the International Working Group on Legume and Vegetable Viruses (IWGLVV)

Jad Chaaban

AUB

- FAFS Assistant Dean for Academic Affairs
- Undergraduate Coordinator for the Agribusiness Program
- Member of the FAFS Strategic Planning Committee
- Research Program Codirector, FAFS-IFI Food Security and Policy in the Middle East Initiative
- Member of the Internal Review Committee
- FAFS representative on the Interfaculty Financial Aid Committee .
- FAFS representative on the University Program Learning Outcomes Committee
- Executive Committee elected member, Nature Conservation Center for Sustainable Future—NCC
- Member, Issam Fares Institute for Public Policy and International Affairs, AUB

Others

- President and Founding Member, Lebanese Economic Association
- Expert, Middle East Youth Initiative - www.shababinclusion.org
- Associate Researcher, Toulouse School of Economics, GREMAQ-INRA, France

Ali Chalak

AUB

- Member of the FAFS Student Affairs Committee
- Member of the FAFS Admissions Committee
- Member of the FAFS Academic and Curriculum Committee
- Member of the University Committee on General Education
- Member of the Program Learning Outcomes Assessment Plan for the BS in Agriculture Committee
- Member of the AUB Web Oversight Committee
- Member of the University Publications Committee

Mustafa Haidar

AUB

- Chairperson of the Agricultural Sciences Department
- Member of the FAFS Administrative Committee
- Member of the FAFS Academic and Curriculum Committee
- AREC Academic Coordinator
- AGSC Representative in the University Learning Outcomes Coordinating Committee
- Member of Ad Hoc Committee on the Revised Sustainable Agriculture Program
- Assistant Faculty Marshall in Commencement Ceremony 2012

Others

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

Adib Saad

AUB

- Member of Ad Hoc Committee on the Sustainable Agriculture Program.

Others

- Executive Secretary of the International Agricultural Committee of the Lebanese Chamber of Commerce, Lebanon
- Member of the National Committee on Stone Fruit Trees, Ministry of Agriculture
- Member of the National Committee on Pome Fruit Trees, Ministry of Agriculture
- Appointed by the National Civil Service Council to chair six different committees to examine and recommend qualified 1) agricultural engineers for research positions, 2) biology laboratory technicians, 3) administrative assistants, 4) agricultural technicians, 5) office assistants, and 6) drivers, all for the Lebanese Agricultural Research Institutes, March 2012

- Continued to serve as senior editor of *Phytopathologia Mediterranea*, official journal of the Mediterranean Phytopathological Union.

Sui Kwong Yau

AUB

- Member and Chairperson of the FAFS Library Committee
- Member of the University Library Committee

Others

- Associate Editor of *Crop Science*
- Member of the editorial board of two international journals: *Communications in Soil Science and Plant Analysis* and the *Scientific World Journal*
- Peer reviewer for 15 manuscripts for different international agricultural journals
- Board Member of the International Crop Science Society

Participation in Workshops and Conferences

Youssef Abou Jawdah

- Attended the Cost Action FA0807 workshop: Emerging phytoplasma diseases of stone fruits and other crops and their possible impact on EU countries. Istanbul, Turkey, December 1-2, 2011
- Attended the meeting of the USAID working group on whitefly transmitted Cucurbit begomoviruses. Larnaca, Cyprus, January 15-18, 2012
- Attended the kick-off meeting of the EU ENPI project: Production of biodiesel from algae in selected Mediterranean countries. Nicosia, Cyprus, January 18-19, 2012
- Attended the meeting of the USAID working group on seed potato production. Rome, Italy, March 26-April 1, 2012
- Attended the 22nd International Conference on Virus and Other Transmissible Diseases of Fruit Crops" (ICVF), Rome, Italy, June 3-8, 2012

Jad Chaaban

- Attended the Consultative Center for Studies and Documentation, Lebanon, Conference on Social Policy Reform, "Mechanisms of Income Redistribution in the Lebanese Economy" (in Arabic), 03/2012.

Ali Chalak

- Participated in the training seminar – Introduction to GAMS, Lebanese Economic Association, Beirut, Lebanon, July 9-13, 2012
- Attended the AAEE/EAAE conference, “Food Environment: The Effects of Context on Food Choice,” Tufts University, Boston, MA, 30-31 May 2012
- Attended the United Nations Conference on Sustainable Development (Rio+20) in the RIO+20 National Consultation Workshop, Beirut, Lebanon, May 3-4, 2012
- Participated in the workshop on the Assessment of Course Learning Outcomes, Center for Teaching and Learning, AUB, October 15 and 22, 2011
- Participated in the Regional Multi-Stakeholder Consultation in the Arab Region in preparation for the Rio+20 Summit, Beirut, Lebanon, October 12-13, 2011

Mustafa Haidar

- Participated in the workshop, “Assessment of Course Learning Outcomes, Center for Teaching and Learning,” AUB, November 25-26, 2011
- Participated in the Gender Barriers towards Employment Impact in Conservation Agriculture workshop in Amman, Jordan along with four students, December 1-3, 2011.
- Participated in the workshop, “Gender Barriers towards Employment Impact in Conservation Agriculture” in Amman, Jordan along with four students December 1 and 3, 2011. The workshop was funded by the German Academic Exchange Service (DAAD)
- Participated in a three day workshop, “Innovative Teaching Methods for CA Module” Beirut, April 1-5, 2012. The workshop was under the DAAD project: Promoting Conservation Agriculture (CA) in the Arab Region.
- Accompanying 10 AGSC students, participated in a summer school to promote conservation agriculture in the Arab world held at the University of Jordan, September 1-14, 2012

- Invited speaker, “The role of higher education in promoting conservation agriculture in the MENA.” Workshop on conservation agriculture. The workshop was sponsored by GIZ and held in Beirut, June 19, 2012.

Armugum Kantharajah

- Attended the organic farming conference in the Mena region in Amman, Jordan, May 2012

Adib Saad

- Attended Lebanon’s Water Resources; Challenges and Opportunities, October 14, 2011, held at AUB
- Attended the Second Conference on Engineering Education in the Arab World,” Beirut, March 22-23
- Presented a paper at the 2012 Annual Meeting of the American Phytopathological Society in Providence, Rhode Island, USA, August 4-8, 2012
- Gave a presentation at the FAFS Brown Bag Seminar series entitled Fifty Years of Plant Pathology Research Activities and Contributions in Lebanon and the Region, December 16, 2011
- Organized two training workshops in cooperation with Ammar Olabi, Chairperson of NFSC Department, for the production of three different species of edible mushrooms on campus in Beirut and at AREC. The funding was granted by the NGO ACIDI/VOCA.

Consultancies

Ali Chalak

- Customer Research (2014 Price Review) – Anglian Water Services Limited, UK (July - August 2012)
- Customer Research (2014 Price Review) – Severn Trent Water, UK (July - August 2012)
- Second stage sewer flooding, supply interruptions and environmental stated preference study – Thames Water Utilities Limited, UK (July – August 2012)
- Analysis of water and wastewater customers’ priorities – South West Water Limited, UK (June 2012)
- Follow-on WTP/WTa Analysis (2014 Price Review) – Thames Water Utilities Limited, UK (February 2012).

- Customer Research (2014 Price Review) – Thames Water Utilities Limited, UK (December 2011- January 2012)

Armugum Kantharajah

- Evaluated a project for the Qatar Research Foundation, Genetic diversity of local germplasm of date palm in relation to genotype flow from the neighboring countries, 2011
- Organic farming in Saudi Arabia, 2012

Reviewed journal articles for

- Annals of Botany
- Australian Journal of Botany
- American Journal of Plant Science
- Scientia Horticultura

Adib Saad

- Invited to lecture for one week in the course, IPM of Mediterranean Fruit Tree Crops, Mediterranean Agronomic Institute of Bari, Italy, April 2012

Strategic Challenges

- The new and most challenging aspect of the coming program is restructuring the undergraduate AGSC curriculum in order to tackle prominent current issues. The main concerns are the following themes: meeting future climate change—mainly water, drought, and food security challenges, and choosing the right educational tools to conserve and use water more efficiently.
- Another challenge is to establish a multi-disciplinary research unit and empower out-reach activities at AREC. To carry out these challenges, new full-time faculty members should be recruited in the field of entomology, extension, farm machinery and practices, and agribusiness.

B. Department of Animal and Veterinary Sciences

Prepared by Dr. Shady Hamadeh, Chairperson, and Lina Jaber, Senior Research Assistant

Highlights

- In response to the difficulties faced by the Veterinary Sciences Program in attracting new students, the department undertook several steps and measures to address this situation:
 - The department considered establishing cooperation agreements with well recognized foreign universities and for that purpose started communications with Jordan University of Science and Technology, UC-Davis, and the University of Pennsylvania and drafted memoranda of understanding with each one, respectively.
 - The department considered offering the BS in Veterinary Sciences students the option of pursuing a second BS in Agricultural Sciences and thus gaining access to the Lebanese Order of Engineers. The courses required for this option were set and approved.
 - The department hosted Dr. Joan Hendricks, dean of the Veterinary School at the University of Pennsylvania, as a URB visiting scholar for a one-week period. Dean Hendricks was consulted to evaluate the current Veterinary Sciences Program and the available facilities at the AVSC Department and FAFS. Based on her recommendation and after departmental deliberation a major decision was taken to freeze the Veterinary Sciences Program as of fall 2012-2013.
 - Another strategic decision was taken to establish full cooperation with the Faculty of Medicine in redesigning and offering a new curriculum for the BS in Veterinary Sciences. In that respect, the department is taking part in the task force established by the Faculty of Medicine to study the possibility of starting a Doctor of Veterinary Medicine (DVM) program at AUB.
- Dr. Shady Hamadeh served as acting chairperson, replacing Dr. Elie Barbour, who had served as chairperson since 2007.
- The department graduated three students with the BS in Veterinary Sciences.
- The department was active in research and development with two projects funded internally and ten projects funded by external agencies, despite the fact that Dr. Barbour was on leave during the spring semester.
- The department faculty members managed to produce six abstracts and proceedings, eleven full articles in peer-reviewed international journals, one article in a peer-reviewed local journal, and four chapters in books.

- The department witnessed an increase in the number of graduate students, with five registered students. This is a 40 percent increase in graduate enrolment as compared to academic year 2010-2011.
- The department was active in seeking collaborative projects with the University of Pennsylvania and drafted several propositions for that purpose.
- The department completed the requirements for recruiting of a new faculty member by screening applicants and interviewing short-listed candidates. As a result, Dr. Susan Prattis was selected to fill in the position of DVM.

Personnel

The AVSC Department has four full-time faculty members and one part-time faculty member (total FTE: 4.33 based on first semester data). The department also employs one senior research assistant and one research assistant who is appointed on research grant. Five graduate assistants were appointed for the first and the second semesters as well as the summer session. The department also has one support staff.

The tables below detail the personnel in the Animal and Veterinary Sciences Department:

Full-time Faculty

Shady Hamadeh	Acting Chairperson
Fawwak T. Sleiman	Professor
Mohamed T. Farran	Professor
Elie K. Barbour	Professor (On leave during Spring 2012)

Research Assistants

Lina Jaber	Senior Research Assistant
Nadim Rawda	Research Assistant on grant

Graduate Assistants

Hamdi Shaar	Fall and Spring
Diana Ahmadih	Fall, Spring, and Summer
Georges Nassif	Spring and Summer
Ali Hammoud	Fall and Spring
Karl Hilan	Fall and Spring

Support Staff

Houssam Shaib	Senior Technician
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Teaching

Student enrollment in courses

Fall 2011-2012

Course	Credits	Enrollment	Instructor
AGSC 301	3 (50%)	12	Dr. Shady Hamadeh
AVSC 203	1	3	Drs. Barbour, Farran, and Sleiman
AVSC 213	4	5	Dr. Shady Tarek
AVSC 241	3	9	Dr. Fawwak Sleiman
AVSC 243	3	8	Dr. Shady Hamadeh
AVSC 271	3	11	Drs. Sleiman and Farran
AVSC 275	3	16	Dr. Elie Barbour
AVSC 281	3	9	Dr. Mohamad Farran
AVSC 305	3	5	Dr. Elie Barbour
AVSC 336	3	3	Dr. Fawwak Sleiman
AVSC 395	1	1	Dr. Mohamad Farran
LDEM 203	3 (50%)	24	Dr. Shady Hamadeh

Spring 2011-2012

Course	Credits	Enrollment	Instructor
AGSC 301	3 (50%)	8	Dr. Shady Hamadeh
AVSC 215	4	2	Dr. Shady Tarek
AVSC 220	3	19	Drs. Sleiman, Farran and Barbour
AVSC 226	3	11	Dr. Mohamad Farran
AVSC 242	3	9	Dr. Fawwak Sleiman/Dr. Shady Hamadeh
AVSC 278	3	8	Dr. Fawwak Sleiman/Dr. Mohamad Farran
AVSC 299	2	1	Dr. Fawwak Sleiman
AVSC 307	3	5	Dr. Mohamad Farran

Summer 2012

Course	Credits	Enrollment	Instructor
AVSC 222	3	11	Dr. Fawwak Sleiman
AVSC 300C	3	1	Dr. Elie Barbour

Research Funding

Internal Grants

One faculty member received a URB grant as below:

University Research Board (URB)

- Barbour, Elie. Impact of Mutations in Hemagglutinin and Neuraminidase Genes of Lebanese Endemic Avian Influenza on Resistance to Tamiflu Drug

Local, Regional and International Grants

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

Barbour, Elie. Optimization of genetic marker characterization in goat sperms: A prerequisite to future selection strategies. LNCSR

Barbour, Elie. Production and pathogenesis in broilers subjected to differently timed Eimeria Spp. challenge. EWABO, Germany

Barbour, Elie. Evaluation of efficacy of major marketed disinfectants against economic microbial etiologies of poultry and zoonotic diseases. EWABO, Germany

Barbour, Elie. The impact of Essential® on production of broilers predisposed with Eimeria Spp. infection followed by a challenge with Clostridium perfringens. Mercordi, Belgium

Farran, Mohamad. Studies on the nutritional and feeding values of feedstuffs produced from locally cultivated and processed safflower, hemp, and low toxin faba beans for poultry. LNCSR

Farran, Mohamad. Effect of dietary lignocellulose on metabolizable energy and nutrient digestibility in poultry diets and on broiler performance under commercial settings. J. RETTENMAIER & SÖHNE, Germany

Hamadeh, Shady. Urban Agriculture: A sustainable solution to alleviating urban poverty addressing the food crisis and adapting to climate change. Two pilot city case studies--Amman, Jordan and Akkar, Lebanon. CIRS-Georgetown University, Qatar

Hamadeh, Shady. Outcome Mapping: Regional Capacity Building in MENA – Phase II. IDRC

Hamadeh, Shady. Communication for Development. FAO

Publications

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

Internationally Refereed Journal Articles

- Kayali G., **Barbour, E. K.**, Dbaiibo, G., Tabet, C., Saadé, M., Shaib, H., Debeauchamp, J., and Webby, R. Evidence of infection with H4 and H11 avian influenza viruses among Lebanese chicken growers. PLoS ONE 6(10): e26818. doi:10.1371/journal.pone.0026818.
- **Barbour E. K.***, Saade, M. F., Sleiman, F. T., **Hamadeh, S. K.**, Mouneimne, Y., Kassaify, Z., Kayali, G., Harakeh, H., Jaber, L. S., and Shaib, H. A. 2012. Optimization of Saanen sperm genes amplification: evaluation of standardized protocols in genetically uncharacterized rural goats reared under a subtropical environment. Tropical Animal Health and Production, 44: 1513-1519.
- **Barbour, E. K.***, Saadé, M. F., Abdel Nour, A. M., Kayali, G., Kidess, S., Bou Ghannam, R., Harakeh, S., and Shaib, H. 2011. Evaluation of essential oils in treatment of broilers co-infected with multiple respiratory etiologic agents. International Journal of Applied Research in Veterinary Medicine 9(4): 317-323.
- **Barbour E. K.***, Itani, H. H., **Sleiman, F. T.**, Saade, M. F., Harakeh, S., Abdel Nour, A., and Shaib H. A. 2012. Preliminary comparison of different immune and production components in local and imported Saanen goats reared under a sub-tropical environment, Tropical Animal Health and Production, 44: 87-93.
- Awwad E., Mabsout, M., Hamad, B., **M. T. Farran**, and H. Khatib, 2012. Fiber-reinforced concrete using industrial hemp fibers. Construction and Building Materials. 35:710-717.
- El-Rami, F. E., Rahal, E. A., **Sleiman, F. T.**, and Abdelnoor, A. M. 2012. Identification of virulence genes among antibacterial-resistant Escherichia coli isolated from poultry. Advanced Studies in Biology, 4:385-396.

Abstracts and Conference Proceedings

- Yau, S. K. and **Farran, M. T.** 2012. Lebanon country report, presented at the 8th International Safflower Conference, Hyderabad, India. January 19 – 23, 2012. In Safflower Research and Development in the World. Ed. Murtthy I. Y. L. N., H. Bassapa, K. S. Varaprasad, and P. Padmavathi. Indian Society of Oilseeds Research 171 – 172.
- **Farran, M. T.***, Barbour, G. W., Usayran, N. N., Ma'alouf, F., Machlab, H. H., Sha'ar, H., Murr, S. K., Salame, G., Ayoub, A., and Abi Nader, N. 2012. Metabolizable energy and amino acid digestibility of five tannin-free faba bean cultivars for poultry. 3rd Mediterranean Poultry summit of WPSA and the 6th International Poultry Conference, March 26 – 29, 2012, Alexandria, Egypt, Book of Abstracts, p. 188.
- Jaber L. S., **Barbour, E. K.**, Abi Said, M., Chedid, M., Giger-Reverdin, S., Duvaux-Ponter, C., **Hamadeh, S. K.*** 2012. Changes in blood and milk parameters in lactating shami goats subjected to intermittent watering. The XI International Conference on Goats (ICG 2012), Gran Canaria, Spain, September 24-27, 2012.
- Harakeh S., Diab-Assaf, M., Khalife, J., **Barbour, E.**, Kumosani, T., Niedzwiecki, A., Rath, M. Effects of a Specific Nutrient Synergy on Metalloproteinases Involved in Leukemia. The American Society for Microbiology Annual Meeting in San Francisco, June 15-20, 2012.
- **Barbour, E. K.**, Shaib, H. A., Cochet, N., Ribeiro, T., Abdel Noor, A. M., Chango, A., Duverlie, T., Harakeh, S. Relatedness of avian influenza H9N2 passaging in avian and mammalian organisms to mutations and pathogenicity. 31st Annual Meeting of the American Society for Virology, Madison, Wisconsin, July 22-25, 2012.
- El-Rami, F., Rahal, E. A., **Sleiman, F.**, Abdelnoor, A.. Bacterial resistance and virulence genes among enteric Escherichia coli isolated from poultry fed antibacterial agents as growth promoting factors. American Society of Microbiology. 112th General Meeting. June 16-19, 2012. San Francisco, CA. Abstr. No: 12-GM-A-652.

Chapters in Books

- Saleh I., Alwan, N., **Barbour, E.**, Azhar, E., and Harakeh S. 2012. Listeria Infections: Epidemiology, Pathogenesis and Treatment. In Listeria Infections : Epidemiology, Pathogenesis and Treatment. Nova Science Publishers, Inc. Hauppauge, NY.; pp.155-166.
- Tawk, S., Abi Said, M., and **Hamadeh, S.** Urban Agriculture and Food Security in the Middle East: A Case Study from Lebanon and Jordan. In Food

Security and Food Sovereignty in the Middle East. Center for International and Regional Studies, Georgetown University, School of Foreign Service in Qatar, Qatar. In print.

- Ghadban E., Talhouk, S., Chedid, M., **Hamadeh, S. K.** Adapting a European Sustainability Model to a Local Context in Semi-arid Areas of Lebanon. In Methods and Procedures for Building Sustainable Farming Systems. Springer. In print.

Services

Elie Barbour

Others

- Editorial boards of the journals *Veterinaria Italiana* and the *World Animal Health Organization*
- Technical adviser to Jezzeine beneficiary farms (150 farms)

Mohamad Farran

AUB

- FAFS representative on the Poultry Committee at the Ministry of Agriculture
- FAFS representative on the National Feedstuffs Committee at the Ministry of Agriculture.
- Member of FAFS Research Committee

Others

- Helping several animal farmers and crop growers either on an individual basis or through NGOs or UN organizations in Lebanon
- Member of Board of Administration, Lebanese National Council for Scientific Research, October 14, 2003 to date
- Member of the Scientific Advisory Committee, CIHEAM
- Vice President for World Poultry Science Association, Lebanese Branch
- Member of the Lebanese Association for Advancement of Sciences
- Adviser to the Speaker of the House on the Parliamentary Committee for Agriculture and Tourism
- Reviewer for national research proposals
- Reviewer for refereed journals

- Member of Rural Women Award Committee, the National Observatory for Women in Agriculture and Rural Areas (NOWARA)
- Helping several animal farmers and crop growers either on an individual basis or through NGOs or UN organizations in Lebanon
- National project coordinator for a telefood project on poultry (FAO and Ministry of Agriculture)

Shady Hamadeh

AUB

- Acting chairperson of the AVSC Department
- Coordinator of the Environment and Sustainable Development Unit (ESDU)
- Member of the FAFS Advisory Committee
- Member of the FAFS Strategic Plan Committee

Others

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

Fawwak Sleiman

AUB

- Member of the FAFS Admissions Committee
- Member of the University Admissions Committee
- Member of the University Disciplinary Committee
- Member of the University Senate
- Member of the Senate Committee on Faculty Affairs
- Appointed by the president to serve on the Senate Pension Plan Working Group
- Senate Committee on Faculty Affairs

Participation in Workshops and Conferences

Elie Barbour

- Keynote speaker at the Second Mentofin Symposium, Antalya, Turkey, October 20-23, 2011
- Attended and presented a poster at the 31st Annual Meeting of the American Society for Virology, Madison, Wisconsin, July 22-25, 2012
- Chairperson of a session at the 3rd Kamal A. Shair Central Research Laboratory Research Conference held at AUB, June 4, 2012

Mohammad Farran

- Attended and presented a paper at the 3rd Mediterranean Poultry Summit of WPSA and the 6th International Poultry Conference, March 26 – 29, 2012, Alexandria, Egypt
- Delivered a special lecture at the First European-Middle East Distributor and Office Seminar, Rosenberg-Holzmühle/Germany, October 26 – 27, 2011
- Attended and participated in writing a synopsis, “Product Quality and Safety Systems,” in the Regional Agro-Industries Forum (RAIF), organized by the MOA, FAO, and UNIDO for countries in the MENA region, Dbayeh, Lebanon, November 15-18, 2011.

Fawwak Sleiman

- Presented a paper at the Infectious Symposium held at San Antonio, Texas, USA, November 16-20, 2011

Shady Hamadeh

- Participated in the Food Security and Food Sovereignty in the Middle East Working Group Meeting, November 13 - 14, 2011, Doha, Qatar
- Attended and presented a paper to the Food Security and Food Sovereignty in the Middle East working group Meeting, in GeorgeTown University, Qatar, April 22-24, 2012.
- Attended and presented a poster at the XI International Conference on Goats (ICG 2012), Gran Canaria, Spain, September 24-27, 2012.

Strategic Challenges

- The AVSC Department faces the challenge of preparing a new curriculum for the BS in Veterinary Sciences that meets the requirements of North American veterinary schools as well as those of AUB and regional and local market needs.
- The department will cooperate with the Faculty of Medicine for the development of a DVM program.
- The department is still working to establish a Zoonoses center as part of its strategic plan.
- The department will work on crystallizing the cooperation agreements with foreign universities into collaborative projects.

C. Department of Landscape Design and Ecosystem Management

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

Highlights

Academic Department Activities

The department secured university approval of its revised curriculum including a change in the degree program title (from BS in Landscape Design to Bachelor in Landscape Architecture), changes in major course requirements, changes in course descriptions reflecting a “rewrite” in the curriculum for the major, and a change in the required number of credits to 144 for completion of the program. The department also initiated the process of securing approvals from the Lebanese Ministry of Education and Higher Education and prepared the necessary documentation required by the New York State Education Department Office of College and University Evaluation. The department is developing a new graduate program in Landscape Studies. The department has approved the introduction of two minors and is in the process of preparing the necessary documentation to secure approval for these minors which are a minor in landscape design and a minor in landscape horticulture. The department has introduced an intensive writing course, Landscape History and Theory (LDEM 201) in collaboration with the English writing center.

New Faculty

The department received 32 applications for its advertised vacant positions in landscape architecture. The recruitment process successfully resulted in the appointment of Dr. Maria Gabriella Trovato as assistant professor, Nayla Al-Akl as lecturer, Yaser Abunnasr as visiting assistant professor (appointments effective Fall 2012) and Dr. Christer Bengs as visiting professor (effective Spring 2013).

Faculty Resignation

Professor Jala Makhzoumi submitted her resignation from the Faculty and was appointed by the department as associate to the Faculty effective July 1, 2012.

A Learning Environment for Students

Faculty members of the department conducted many activities beyond classes and studios to enhance student learning experience:

- *Senior LDEM students were exposed to multi-disciplinarity* through two workshops with students from the American University in Cairo (AUC), one in Beirut and one in Cairo, to tackle cultural landscapes through their respective class projects. Rabih Shibli, part-time lecturer in the department, and Amy Rowe from the Gerhart Center (AUC) organized these workshops with partial support from CCECS.
- Five senior students were involved in *creativity-enhancing activities* by participating under the supervision of R. Shibli in workshops entitled “The Imagination 3: Suitable Cultural Institutions,” organized by Henning Larsen Architects at Université Saint Joseph (USJ).
- Senior *students interacted with professional landscape architects* through an on-site design workshop organized by Dr. Jala Makhzoumi with Professor Jillian Wallis from the University of Melbourne, Australia.
- Three senior students, accompanied by Julie Weltzien, *participated in an international competition*, the annual WAT (Workshop Atelier/Terrain) of the UNESCO Chair in Landscape and Environmental Design of the University of Montreal (CUPEUM) UNESCO Atelier Terrain in Montreal, Canada.
- Sophomore students *engaged in tree planting activity and annual plant sale* of the department under the supervision of Salma Talhouk and Monika Fabian.
- Second and third year students *focused on water conservation* through a two week water centered landscape design studio organized by Julie Weltzien, Yaser Abunnasr, and Elke Berger, guest landscape architect from Germany.

- **Senior students engaged with international media** (AL-HURRA) by participating, under the supervision of R. Shibli, in a documentary entitled *Students' Nation* that highlights their projects.

Guest Speakers

Several guest speakers were invited to the department including Imad Gemayel, Saad Sabea Ayoun from the Agrinet company, Professor Jillian Wallis from the University of Melbourne, Australia, and Elke Berger, landscape architect and owner of Studio B, Germany.

Involvement in Interdisciplinary and Interfaculty Activities

Faculty members of the department were actively involved in university-wide centers and programs:

- **Rami Zurayk** is serving as the director of the Interfaculty Graduate Environmental Sciences Program (IGESP) and is leading the review and drafting of a proposal for a new IGESP program, while Nadim Farajalla is assisting on the new IGESP program curricular review.
- **Nadim Farajalla** serves as the Faculty Research Director of the Climate Change and Environment in the Arab World Program at the Issam Fares Institute for Public Policy and International Affairs (IFI). He is heavily involved in developing a research program for the next three years on climate change.
- Salma Talhouk is leading two projects under NCC: the **Biodiversity Village Award (BVA)**, which involves 18 village communities in ecological planning through participatory mapping workshops, and **Nature ConVersation** which seeks to produce a set of extracurricular activities that enables schools to contribute to nature conservation with their students through networking with other schools, civic engagement, and experiential learning.
- Jala Makhzoumi and Salma Talhouk also participated as moderators in NCC's **Ta3a Ne7ke**, an annual debate series held by the center.

Department Outreach Activities

- **School visits to the greenhouse area:** The department received around 210 students from various schools (IC, German School) to learn about plants and miscellaneous activities such as composting.
- **Gardening workshop for AUB community:** A gardening workshop by Nahla Bitar, organized by LDEM in collaboration with CCECS, was offered to the AUB community and covered basic gardening skills for plant lovers.

- **Gardening workshops in Ain El Helwe Camp:** Monthly gardening workshops were given throughout the year by Rasha Moussawi (under the supervision of Salma Talhouk and in collaboration with CCECS) for the Women's Center of the Ein el-Helweh Palestinian camp.
- **Ornamental plant sales:** The department organized several plant sales for the AUB community.

Personnel

The LDEM Department had seven full-time faculty members, thirteen part-time faculty members (Total FTE's: 10.95 based on first semester data) and sixteen research assistants out of which twelve were appointed on grants. Five graduate assistants were appointed for the academic year 2011-2012. The department has one support staff. The tables below detail the personnel in the Landscape Design and Ecosystem Management Department.

Full-Time Faculty

Salma N. Talhouk	Professor, Chairperson
Yaser Abunnasr	Visiting Assistant Professor
Monika Fabian	Instructor
Nadim Farajalla	Associate Professor; Faculty Research Director of Climate Change and Environment in the Arab World (IFI)
Jala Makhzoumi	Professor (resigned effective July 1, 2012 and appointed as Associate to the Faculty)
Julie Weltzien	Lecturer
Rami Zurayk	Professor, Director of IGESP

Part-time Faculty

Robert Allam	Assistant Instructor
George Battikha	Senior Lecturer
Bachar El-Amine	Lecturer
Sara Hage	Lecturer
Nahida Khalil	Lecturer
Zeina Kronfol	Instructor
Wissam Melhem	Lecturer
Ramzi Mezher	Lecturer

Halim Nader	Lecturer
Nour Raad	Assistant Instructor
Dima Rachid	Assistant Instructor
Rabih Shibli	Lecturer
Mariana Yazbek	Lecturer

Research Assistants

Nadine Modad	Departmental Research Assistant
Anne Gough	Full-time instructor (with Julie Weltzien); Mellon Foundation grant
Mayssa Abou Rahal	Full-time Research Assistant (Y. Abunnasr seed money grant/LDEM)
Bassam Hamzeh	Graduate Research Assistant (LDEM and on seed money grant with Dr. Kantharajah/AGSC)
Carol Itani	Part-time Research Assistant (on grant, Dr. Salma Talhouk/NCC)
Wassim Kays	Full-time Field Expert (on grant; Dr. Salma Talhouk/NCC)
Miriam Mattouk (Fall 2012)	Full-time Research Assistant (on grant; Dr. Salma Talhouk/NCC)
Rasha Moussawi	Full-time Research Assistant (LDEM/ Dr. Talhouk and CCECS)
Dima Ousta	Full-time Research Assistant (on grant, Dr. Salma Talhouk/NCC)
Nathalie Pano	Part-time Research Assistant (on grant, Dr. Salma Talhouk/NCC)
Dima Rachid	Part-time Faculty (LDEM and NCC)
Roland Riachi	Part-time Research Assistant (with Y. Abunnasr), fund from seed money grant
Karim Shaar	Part-time Research Assistant (on grant, Dr. Salma Talhouk/NCC)
Rasha Talhouk	Full-time Research Assistant curriculum development and reviews
Lama Yasmin Tawk	Part-time Research Assistant (on grant, Dr. Salma Talhouk/ NCC)

Graduate Assistants

Farah El Samarai	Ecosystem Management
Dima Fay	Ecosystem Management
Bassam Hamzeh	Ecosystem Management
Moustapha Itani	Ecosystem Management
Salwa Sabbagh	Urban Design – FEA

Support Staff

Elias Abi Samra	Greenhouse Technician
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Teaching

Courses Offered

During the academic year 2011-2012, the department offered a total of twenty-six undergraduate courses, two seminars and three graduate courses. Among the undergraduate courses, nine were design studios and seventeen were lecture-based courses.

Student Enrollment in Courses

Fall 2011-2012

Course	Credits	Enrollment	Instructor(s)
LDEM 200	4	31	J. Weltzien(P)/R. Mezher
LDEM 201	3	33	B. El Amine
LDEM 203	3	24	S. Hamadeh/N. Farajalla
LDEM 204	6	23	J. Weltzien(P)/W. Melhem/M. Yazbek
LDEM 209	4	28	S. Talhouk/M. Fabian (lab)
LDEM 215	3	21	E. Abou Fakhr/M. Haidar/A. Saad (P)
LDEM 216	6	19	Y. Abunnasr (P)/S. Hage/ R. Allam
LDEM 217	3	20	R. Zurayk/R. Talhouk (lab)
LDEM 241	6	21	J. Makhzoumi (P)/ R. Shibli/G. Battikha
LDEM 230	3	21	N. Farajalla
LDEM 244	3	23	H. Nader
LDEM 264	3	11	G. Battikha
LDEM 290	3	24	N. Farajalla/B. El-Amine
LDEM 295	1	22	G. Battikha

Spring 2011-2012

Course	Credits	Enrollment	Instructor(s)
LDEM 202	6	25	B. El-Amine(P)/R. Mezher/N. Raad
LDEM 211	3	26	S.Talhok(P)/M. Fabian (lab)
LDEM 212	3	19	G. Battikha
LDEM 227	3	21	A. Saad (P)/E. Abou Fakhr/M. Haidar/ L. Hanna (lab)
LDEM 228	6	23	Y. Abunnasr (P)/M. Yazbek/Z. Kronfol
LDEM 242	6	21	Rabih Shibli(P)/J. Makhzoumi/ N. Khalil/D. Rachid
LDEM 245	3	23	N. Farajalla
LDEM 246	6	19	J. Weltzien (P)/W. Melhem
LDEM 260	3	24	B. El-Amine
LDEM 261	3	9	J. Weltzien
LDEM 263	3	23	R. Zurayk (P)/M. Yazbek
LDEM 265	3	23	G. Battikha (P)/A. Kantharajah
LDEM 296	1	22	N. Farajalla
LDEM 630	3	6	R. Zurayk
LDEM 631	3	9	Bashour(AGSC)/Y. Abou jawdeh (AGSC)
LDEM 633/ URDS 664	3	19	J. Makhzoumi

Summer 2011-2012

Course	Credits	Enrollment	Instructor(s)
LDEM 250	3	22	W. Melhem

P stands for principle

Completed Theses and Thesis Advising

The graduate student enrollment in the ECOM program for the academic year 2011-2012 was nine current students and three new students. Nine students have chosen the thesis option and three students have chosen the project option.

Completed theses

MSc Student	Thesis or Project Title	Advisor	Date of Graduation
Carol Itani	Thesis - "Women's perspective on the management of natural resources: case study of Irsal, Batloun, and Kweikh"	Dr. Salma Talhouk	Spring 2011/2012
Yara Daou	Thesis - "Impact of rainbow trout aquaculture along the Lebanon portion of the Assi River on community development and water quality"	Dr. Nadim Farajalla/ Dr. Imad Saoud (Biology Department)	Fall 2011/2012
Dalia El Jawhary	Project - "Assessing the effectiveness of indigenous methods of water resources management use in agriculture"	Dr. Nadim Farajalla/Dr. Musa Nimah (AGSC Department)	Spring 2011/2012
Noura Hazim	Thesis - "Assessment of the potential of establishing extensive green roofs at the American University of Beirut"	Dr. Salma Talhouk	Summer 2011/2012

Interfaculty and Inter-institutional Thesis Advising

- Department of Architecture and Design, AUB: **Y. Abunnasr** is serving as a committee member for an urban design master's student, Krystina Baroud. Title: "Integrating archaeological sites into city fabric, the city of Saida, Lebanon"
- Department of Architecture, Faculty of Art and Architecture, Tarbiat Modares University, Iran: **J. Makhzoumi** is serving as an external adviser to one PhD student, Ferial Ahmadi. PhD dissertation title: "Ecological landscape Approach to Nature Conservation in Iran: Margoan Protected Area"
- European University Institute, Department of Political and Social Sciences, Badia Fiesolana, Florence, Italy. **J. Makhzoumi** is serving as an external adviser to one PhD student, Helge Hiram Jensen. PhD dissertation title: "European and Arabic traditions of deliberation in resource management"
- University of Reading, Department of Agriculture, UK. **S. Talhouk** is serving as co-adviser to one PhD student, Nisrine Machaka. PhD dissertation title: "Population Ecology and Distribution of *Orchis galilaea* (Bornm. and M. Schulze) Schltr. in Lebanon"; main supervisor, Professor Ken Norris

- Bangor University, Wales (UK), School of Environment, Natural Resources and Geography (SENRGY). **S. Talhouk** is serving as a co-adviser to one PhD student, Arbi Sarkissian. PhD dissertation title: “Institutions and natural resource management: exploring payments for ecosystems services (PES) to support decentralized community-integrated native tree planting in Lebanon.” Co-advisers: Dr. Neal Hockley and Dr. Amin Kamete

Research Funding

Local, Regional, and International Grants

Three faculty members attracted national and international grants as below:

- Talhouk, Salma. Nature Conservation Center (NCC–AUB). Duration: January 2011 – February 2012. Funded by Coca Cola Foundation
- Talhouk, Salma (NCC–AUB/University of Ottawa. Food and Health in Rural Lebanon: Options to Improve Dietary Diversity, Food Security, Livelihoods, and Ecosystem Management. Duration: March 2009–February 2012. International Development Research Center (IDRC), Canada – Ecohealth Program
- Talhouk, Salma (NCC–AUB). Biodiversity Village Award 2011. Duration: October 2010 – February 2012. Funded by Coca Cola Foundation
- Talhouk, Salma (NCC–AUB). Biodiversity Village Award 2012. Duration: January 2012 – January 2013. Funded by Coca Cola Foundation
- Weltzien, Julie (FAFS–AUB). 4D Dance Design-Design Dance, Reestablishing Physical Connections to the Abandoned Environment. Duration: October 2011 – October 2012. Funded by the Mellon Foundation for the Arts and Humanities
- Zurayk, Rami (IGESP–AUB). The Palimpsest of Agrarian Change. Duration: 2012-2015. Funded by London School of Economics (LSE)

Publications

The LDEM faculty members published a total number of four articles in internationally refereed journals in line with the department mission and research agenda listed below:

- Relationship between rural landscapes and livelihood
- Landscape planning approach to nature and rural heritage conservation

- Conservation and sustainable use of native flora
- Relationship between landscape design, education, and human behavior
- Water conservation, climate change, and their impact on urban and rural landscapes

Internationally Refereed Journals (*Corresponding/Senior author)

- **Makhzoumi, J.***, Chmaitelly, H., and Lteif, C. (2012) “Holistic conservation of bio-cultural diversity in coastal Lebanon: a landscape approach.” *Journal of Marine and Island Cultures* 1, 1-11.
- **Zurayk, R.*** 2011. Occupy the Global Food Regime. *Journal of Agriculture, Food Systems, and Community Development*. Volume 2, Issue 1, 3 pp. ISSN 2152-0801 on-line, December 2011. (Regular editorial column).
- Garcon, L.* and **Zurayk, R.** L’œil et la bouche: Le goût du paysage pour préserver le patrimoine alimentaire libanais. *Food and History*. Brepols Publishers. Volume 9, Number 2/2011. ISSN: 1780-3187. On-line: June 2012.
- **Zurayk, R.*** 2012. Bread, freedom, and social justice. *Journal of Agriculture, Food Systems, and Community Development*. Volume 2, Issue 2, 4 pp. ISSN: 2152-0801 online. April 2012.

Articles in Other Journals

- **Zurayk, R.**, Gough, A., Sourani, A., and Al jaajaa, M., 2012. Food Security Challenges and Innovation: The Case of Gaza. *Food Insecurity in Protracted Crises*. FAO. September 13-14, 2012.
- Abdelnour, S., Tartir, A., and **Zurayk, R.** 2012. Farming Palestine for Freedom. *Al-Shabaka: The Palestinian Policy Network*. July 2012.
- **Zurayk, R.** 2011. Egypt’s freedom harvest. *New Internationalist*. Issue 447.

Book Articles or Chapters

- **Abunnasr, Y.*** and Hamin, E. (2012). The Green Infrastructure Transect: An Organizational Framework for Mainstreaming Adaptation Planning Policies. Book chapter in *Resilient Cities*, Otto-Zimmermann, K. (ed.). Springer Verlag.
- **Makhzoumi, J.*** (2011). “The Right to Landscape: An Introduction,” pp. 1-20. Co-editors: Egoz, S., Makhzoumi, J., and Pungetti, G. (eds.). *The Right to Landscape: Contesting Landscape and Human Rights*. Ashgate, London.
- **Makhzoumi, J.*** (2011). “Colonizing mountain, paving sea: Neoliberal politics and the right to landscape in Lebanon.” In S. Egoz, J. Makhzoumi, and G. Pungetti (eds.). *The Right to Landscape: Contesting Landscape and Human Rights*. Ashgate, London. pp. 227-242.

- **Makhzoumi, J.*** (2012) "Olive multifunctional landscapes in Cyprus: sustainable planning of Mediterranean rural heritage." In Elizabeth Conrad and Louis Cassar (eds.) *Landscape Approaches for Ecosystem Management in Mediterranean Islands*. Progress Press Ltd, Malta. pp. 219-234.
- **Makhzoumi, J.*, Talhouk, S. N., Zurayk, R., and Sadek, R.** (2012.) "Landscape Approach to Bio-Cultural Diversity Conservation in Rural Lebanon." In John Tiefenbacher (ed.). *Perspectives on Nature Conservation – Patterns, Pressures and Prospects*. In Tech, ISBN 978-953-51-0033-1, released on-line, pp. 179-198. (<http://www.intechopen.com/articles/show/title/landscape-approach-to-bio-cultural-diversity-conservation-in-rural-lebanon>)
- Myntti, C.*, Mabsout, M., and **Zurayk, R.** (2012). "Through Thick and Thin: The American University of Beirut Engages Its Communities." In McIlrath, L., Lyons, A., and Munch, R. (eds.). *Higher Education and Civic Engagement*, pp. 205-219. ISBN: 978-0-230-34037-4.
- **Zurayk, R.*** (2012). Can sustainable consumption protect the Mediterranean landscape? In MEDITERRA 2012. The Mediterranean Diet for Sustainable Regional Development. CIHEAM, Paris, France. pp. 156- 171. ISBN 978-2-7246-1248-6.

Books

- **Makhzoumi, J., Egoz, S., and Pungetti, G.** (co-editors). (2011). *The Right to Landscape. Contesting Landscape and Human Rights*. Ashgate Publishing, UK.
- **Zurayk, R.** (2011). *War Diary: Lebanon 2006*. Just world publishing. 59 pp. ISBN 978-1-935982-09-8.

Abstracts and Conference Proceedings (Corresponding/Senior author *)

- Hamin, E. and **Abunnasr, Y.** Planning at the Century Scale: Climate Change Weak and Strong. Presented to the annual Association of Collegiate Schools of Planning (ACSP) Conference," Envision Tract, Salt Lake City, USA. October 13-16, 2011.
- **Abunnasr, Y.*** and Hamin Elisabeth. "A Climate-Adaptive Planning Process: Collapsing Time to Manage Uncertainty" at the Resilient Cities 2012 Conference held in Bonn, Germany. May 12-15, 2012.
- **Abunnasr, Y.*** "How Much Green Infrastructure? Measuring the Adaptive Capacity of the Boston Region" at the Resilient Cities 2012 Conference held in Bonn, Germany. May 12-15, 2012.
- **Farajalla, N. S.,*** 2012. "Climate Change Implications," presented at the Participatory Workshop on Environment and Security Issues in the Southern

Mediterranean Region organized by the Organization for Security and Co-operation in Europe, Amman, Jordan. June 18 – 22, 2012.

- **Farajalla, N. S.,*** 2012. "Overview of Lebanon's Coastal Aquifers and Groundwater." Expert Meeting, "Assessment of Risk and Uncertainty Related to Coastal Aquifer Management in the Mediterranean," Organized by UNESCO – IHP, GEF – UNEP, and the Aristotle University of Thessaloniki. February 20 – 21, 2012.
- **Talhouk, S. N.,* Fabian, M.,** Moussawi, R., and Hazim, N. Extensive green roof modules: towards a participatory process for urban greening and biodiversity conservation in Beirut. World Green Roof Congress. Copenhagen, Denmark. September 19-20, 2012.
- **Weltzien, J.*** and Gough, A. Project: 4D_ Dance Design-Design Dance, Lebanon. Environmental Utterance Conference, University College, Falmouth, UK. September 1-2, 2012.

Newspaper or Magazine Articles

- **Zurayk, R.** 2011. Egypt's freedom harvest. *New Internationalist*. Issue 447.

Services

Yaser Abunnasr

AUB

- Member of the ad hoc committee for the LDEM Program Learning Outcome Assessment
- Member of the ad hoc committee for the revision of the LDEM undergraduate program
- Lead faculty member for the design and redevelopment for the Green House Project (with Dr. Salma Talhouk)
- GIS laboratory lead coordinator (with Dr. Nadim Farajalla)
- Student orientation presentation-International College (IC) students

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)
- Chairperson of the university Student Affairs Committee
- Member of the Advisory Committee for the University's Center for Teaching and Learning
- Member of the FAFS Admissions Committee
- Member of the FAFS Research Committee
- Member of the FAFS Student Affairs Committee
- Liason officer between FAFS and the FAFS Alumni Chapter

Others

- Lectured to several civic organizations and local clubs on climate change, the environment, and water resources
- Support to environmental NGOs
- Mubadarat – a development NGO assisting to clean up Keserwan's environment. Established environmental clubs in 15 schools in the region and gave talks in all 15. Also established the Green Parliament – a grass roots movement to work as a lobby on environmental issues
- Worked with Ghassan Mokheiber on Beirut River project – “trying to save what we have and improve and ameliorate what is damaged”
- Helped organize the conference on water resources for the FAFS Alumni Chapter and the exhibition and gala dinner held on this occasion

Jala Makhzoumi

Others

- Member of Editorial Board, *Journal of Marine and Island Cultures*, Elsevier, Netherlands

Salma Talhouk

AUB

- Chairperson, Department of Landscape Design and Ecosystem Management (LDEM)
- Member of FAFS strategic plan committee

- Member of the Executive Committee of NCC (Initiative for Biodiversity Studies in Arid Regions), 2010 - present
- FAFS representative member of the University Learning Outcome Coordination Committee.
- Chairperson of the ad hoc committee for the revision of the LDEM undergraduate program
- Chairperson of the ad hoc committee of the LDEM Program - Learning Outcome Assessment
- Chairperson of the ad hoc committee for the development of a master's program at LDEM
- Senate secretary
- Member of the Office of International Programs Advisory Committee

Others

- Led a National Biodiversity Village Award event
- Prepared school extra-curricular nature activity-related guide
- Led national tree-planting campaign
- Reviewed UNDP small grants program
- Member of the biodiversity and genetic varieties of olives committee at the Ministry of Agriculture

Julie Weltzien

AUB

- Member of the AUB Choral Society
- Student exchange program coordinator with the workshop_atelier / terrain (WAT) of the UNESCO Chair in Landscape and Environmental Design of the University of Montreal (CUPEUM)
- Search committee for director of music in the Fine Arts and Art History Department
- Organized student performance, “Human Sprawl”
- Public performance in Hamra/Beirut with students from LDEM 261: abandoned_alive
- Academic adviser, Landscape Student Society

Others

- Design, implementation, and coordination of the department's participation in the Beirut Spring Festival Garden Show at Beirut Hyppodrome (May 2012)
- Movement and performance workshops for volunteers: J. Weltzien prepared a public performance. With the help of these workshops, Weltzien prepared a movie filmed the first week of February. Also held weekly sessions with volunteers (students and non-students). The final performance in June 2012 entitled "4D The Performance, The Snow The Sea The City" was also an interdisciplinary project with students and volunteers from AUB and outside. In addition, Weltzien gave lectures at AUB and LAU related to the workshop.
- Movement and performance workshops for volunteers: Weltzien prepared a public performance. With the help of these workshops, she prepared three movies filmed in February, March, and June 2012. Also, weekly sessions with volunteers (students and non-students) were held.
- Was an invited juror at LAU (Architecture Department)
- Gave a lecture at the Communication Department at the Lebanese American University (LAU) entitled "4D, an interdisciplinary approach to spatial design"
- Received first prize in the Zaarour Resort Competition with Najjar and Najjar.

Rami Zurayk

AUB

- Member of the Interdisciplinary Programs Committee 2011-2012
- Director of the Interfaculty Graduate Environmental Sciences Program

Participation in Workshops and Conferences

Yaser Abunnasr

- Presented a paper entitled "The Potential of Green Infrastructure in Beirut: Integrating Context and Scale" at the symposium titled Integrated Urbanism Dialogues 1 organized by the Faculty of Architecture and Planning in Stuttgart University, Germany, December 7-9, 2011
- Presented an abstract entitled "A Climate-Adaptive Planning Process: Collapsing Time to Manage Uncertainty" at the Resilient Cities 2012 Conference held in Bonn, Germany, May 12-15, 2012

- Presented an abstract entitled "How Much Green Infrastructure? Measuring the Adaptive Capacity of the Boston Region" at the Resilient Cities 2012 Conference held in Bonn, Germany, May 12-15, 2012

Nadim Farajalla

- Gave a presentation entitled "Impact of Climate Change on Trends of Drought Frequency and Consumptive Water Use in the Eastern Mediterranean" at the Symposium of Water and Energy in Sustainable Food Security, Lebanon, December 2 – 3, 2011
- Gave a presentation entitled "Drought Frequency and Evapotranspiration Trends under a Changing Climate in the Eastern Mediterranean" at the Water Scarcity and Policy in the Middle East and Mediterranean Conference, organized by Cornell University, Ithaca, NY, November 4 – 6, 2011
- Gave a presentation entitled "Drought Frequency and Consumptive Water Use" at the Consultations on Adaptation to a Changing Climate in the Arab Countries organized by the World Bank, UNDP, and League of Arab States, Beirut, Lebanon, October 26, 2011
- Gave a presentation entitled "Water Resources Management – Alternate Water Sources and Demand Management" at the conference on Lebanon's Water Resources: Challenges and Opportunities, organized by AUB's FAFS Alumni Chapter, Beirut, Lebanon, October 14, 2011
- Gave a presentation entitled "The Future of Water Supply and Demand in the GCC Countries" at the conference on Water Scarcity and Food Security in the Arabian Gulf at the Emirates Center for Strategic Studies and Research in Abu Dhabi, UAE, March 26-27, 2012
- Attended and presented at a workshop entitled "Regional Multi-Stakeholder Consultation in the Arab Region in Preparation for the Rio+20 Summit" organized by ESCWA, ANND, DIAKONIA, SIDA AUB-IFI, and ANND, Beirut, Lebanon, October 12 - 13, 2011
- Served as keynote speaker in a workshop on mist/fog collection held in Salalah city, Oman. The workshop was organized by Oman Water Society (OWS), September 24 - 25, 2012

Jala Makhzoumi

- Participated in an Interdisciplinary Research Seminar on landscape and heritage and gave a lecture on landscape and heritage at Evora University in Portugal. This seminar was organized by the Centre for Art History and Artistic Research (CHAIA) of the University of Evora, Portugal, November 24 -28, 2011.

- Gave a workshop entitled “Rural Landscape Heritage” to PhD students and gave a lecture entitled “Landscape Heritage at the Rural-Urban Interface” at the University of Évora, Department of Landscape, Environment, and Planning, Landscape Architecture Masters Program in Spain, November 25-26, 2011
- Was an invited speaker at a PhD International Workshop in the Landscape Department, University of Evora, Portugal. November 2011
- Served as keynote speaker at EFLA Regional Congress, Green Infrastructure: From Global to Local, held in Saint Petersburg (Russia), Stockholm, and Upsalla (Sweden), June 11-15, 2012.

Rabih Shibli

- Gave a presentation entitled “Bridging Boundaries: Learning to Learn in Chaos” at the Gerhart Center at the American University in Cairo (AUC) to faculty members involved in community-based learning, February 2012
- Gave a presentation entitled “Community Based Learning” at the Center for Teaching and Learning (CTL) at AUB, March 2012
- Gave a presentation entitled “Conceptualizing Boundaries: Urban Design in the Arab World,” City Debates, AUB, May 2012

Salma Talhouk

- Participated in and presented her research and abstract entitled “Extensive Green Roof Modules: Towards a Participatory Process for Urban Greening and Biodiversity Conservation in Beirut” at the 3rd World Green Roof Congress held in Copenhagen, Denmark, September 18-21, 2012

Julie Weltzien

- Participated and gave a presentation entitled “4D_ Dance Design-Design Dance, Lebanon” at the Environmental Utterance Conference organized at University College, Falmouth, UK, September 1-2, 2012. During this conference, Weltzien presented the results of her research supported by the Mellon Foundation for the Arts and Humanities for a project called “4D Dance Design - Design Dance, Reestablishing Physical Connections to the Abandoned Environment.”
- Organized and coordinated a 4D Snow Movie workshop and a 4D Salt Paddies Enfeh Movie workshop

- Attended and accompanied three senior LDEM students to the annual WAT (Workshop Atelier/Terrain) of the UNESCO Chair in Landscape and Environmental Design of the University of Montreal (CUPEUM) held in Montreal, Canada, November 20 to December 3, 2012
- Was an invited juror for the Mittelmeerland Workshop held in Beirut and organized by AA London, March 2012

Rami Zurayk

- Attended the global meeting of NGOs and CSOs and member states in FAO in Rome to finalize the guidelines on sustainable land tenure and land management, representing Arab civil society, October 2011
- Attended the “CFS-led Plenary Negotiations for the Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries, and Forests” meeting in Rome, Italy. The meeting was supported by the Centro Internazionale Crocchia on behalf of the International Food Security and Nutrition Civil Society Mechanism, October 10-14, 2011.
- Attended and presented two papers at the international conference, Agriculture in the Shadow of the Arab Oil Economy Council for British Research on the Levant in Amman, Jordan, January 28-29, 2012
- Attended the Land Forum in Egypt in January 2012. The Land Forum brings together civil society organizations and activists to influence decision making on the future of land and agrarian issues on the rights of people for sovereignty over their resources. R. Zurayk was the keynote speaker in the opening session. He also presented a briefing about the state of the Rome negotiations in a separate session.
- Participated in the conference, Land, People’s Right, and Self Determination, organized by the Housing and Land Rights Network on behalf of the Habitat International Coalition. The meeting was held in Cairo, Egypt, January 15-17, 2012.
- Participated in the conference, Agriculture in the Shadow of the Arab Oil Economy, supported by the Council for British Research on the Levant on behalf of the British Institute. The conference was held in Amman, Jordan, January 28-30, 2012.
- Attended and presented a paper at the workshop for contributors held to discuss the first drafts of papers for the forthcoming volume, *The Arab Uprisings*, London School of Economics, London, April 17-18, 2012

Consultancies

Yaser Abunnasr

- *Coordination and design of facilities within the Faculty of Agricultural and Food Sciences:* Y. Abunnasr was assistant to the dean at FAFS.
- *Landscape and Green Concept for the NWD Development in Downtown Beirut.* In collaboration with Prime Design (Beirut) and Ecofys (Germany)

Nadim Farajalla

- *Environmental management plan for a development project in Makkah, KSA:* N. Farajalla has been working on this project since September 2011. It involves protecting Hema and wadis. The plan involves reducing pollution in urban areas from various sources and a plan to recycle and reuse treated sewage effluent.
- Involvement in organizing and running workshops on the RIO+20 and the COP 17 meetings

Jala Makhzoumi

- *Damascus Master Plan 2030:* J. Makhzoumi has been Landscape Planning Consultant since 2010 with Khatib and Alami for this project. Phase I and II of the project are now complete; Phase III is currently in its last stage.

Salma Talhouk

- Submitted in collaboration with the International Union for Conservation of Nature (IUCN), a *Plant Guide on Important Plant Areas in Lebanon*

Julie Weltzien

- *Diverse projects with Green Studios, Antelias, Lebanon.* J. Weltzien is a current consultant on diverse projects that include designs and planting schemes for private gardens, a public park in Baabda, and general consulting on project ideas for public engagement.
- *Diverse projects in Lebanon:* J. Weltzien is a current consultant on diverse projects that include designs and planting schemes for private gardens, Zaarour Resort Development with Najjar and Najjar Architects between Beirut and Vienna.

Strategic Challenges

During this past year, two out of the three strategic challenges, namely securing the approval process of the revised undergraduate program and recruiting new faculty members were met. In addition to the third challenge, four additional challenges will be tackled throughout 2012-2013:

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

D. Department of Nutrition and Food Sciences

Prepared by Dr. Ammar Olabi, Chairperson

Highlights

During the period of October 1, 2011 to September 30, 2012, the Nutrition and Food Sciences Department witnessed several changes that contributed to its growth and development. Several actions were taken by the department as follows:

- The NFSC Department is still in the process of conducting the Program Review for its five academic programs: three undergraduate programs and two graduate programs. The Program Review Committee, composed of Drs. Olabi (Chairperson), Obeid, Toufeili, and Ghattas, has made major progress in terms of selecting the external reviewers, write-up, administering surveys, and analyzing the survey data.
- The dissemination event of the first Associated Research Unit (ARU), "Undernutrition and Obesity in Lebanon," was held during January 2012 at AUB. This event was organized by the Department of Nutrition and Food Sciences in collaboration with the Lebanese National Council for Scientific Research (CNRS), the Nutrition Department of the Faculty of Pharmacy at University Saint Joseph (USJ), and the Human Nutrition and Dietetics Department at Université Saint-Esprit de Kaslik (USEK), under the patronage and presence of HE the Minister of Public Health Ali Hassan Khalil.
- Drs. Ausman and Ghosh (from the Tufts Nutrition Policy Program in Ras Al Khaimah, UAE) visited the department during January 2012 to discuss possible collaborations.

- The NFSC Department stood to benefit from the visit and expertise of Dr. Connie Weaver, who came to the department as a URB scholar during December 2011. Dr. Connie Weaver is a distinguished professor and head of the Department of Foods and Nutrition at Purdue University. During her visit, Dr. Weaver gave three lectures and conducted productive meetings with faculty members.
- The Department of Nutrition and Food Sciences benefited from a talk entitled “New Obesity Phenotypic Body Shape and Volume” by Dr. John A. Shepherd. Dr. Shepherd is a member of the International Committee on Radiation Measure and Units (ICRU) on Bone Densitometry, an expert consultant for the UN’s International Atomic Energy Agency Nutrition Section, and a faculty instructor for the International Society of Clinical Densitometry (ISCD).
- Again this year, the NFSC Department took part in the Qatrah Beverage Product Innovation Competition (2011). The Food Science and Management faculty members participated as judges for the above competition for the nonalcoholic beverages industry in the Arab world.
- Dr. Zeina Kassaify established the Lebanese Association for Food Safety to act as a forum for food safety for professionals and university graduates. The association is meant to be an authority and a body of experts who will provide services for the food sector and implement a food safety culture in Lebanon and the region and for the development and training of food science students. Dr Kassaify affiliated the Lebanese Association for Food Safety with the International Association for Food Protection (IAFP, USA) to give an international edge, share knowledge, and provide experience for our graduates and students, as well as for professionals.
- A draft proposal on a new degree in the Public Health Nutrition Program has been prepared by Drs. Hala Ghattas and Lama Mattar. A research assistant with an MS in public health has been appointed to assist the committee in the development of the new joint program in Public Health Nutrition between the FAFS and FHS.
- Drs. Omar Obeid and Lara Nasreddine are preparing a course on food intake control to be given to graduate nutrition students.
- Dr Kassaify is preparing a draft for a new program at the master’s level in food safety and quality.
- The PhD program in biomedical sciences (with a specialty in nutrition) in collaboration with the Medical School was approved. The NFSC faculty members discussed options to secure funding for financial support of the would-be candidates in the PhD graduate program in Biomedical Sciences/

Nutrition. Members agreed to fund the tuition of the future PhD candidate from the graduate assistants’ allocation. Dr. Obeid is making contact with funding agencies to secure PhD scholarships, and the logistics for the management of the program of future departmental PhD students is under development.

- An undergraduate tutorial nutrition student group supervised by Dr. Ghattas won the Nutrition and Health IBDAA competition and ended up with the first prize by winning over seven other groups.
- The Department of Nutrition and Food Sciences and the Department of Clinical Nutrition, AUBMC, in collaboration with the Lebanese Academy for Nutrition and Dietetics, organized a conference entitled Dietary Management of Metabolic Syndrome, May 16-17, 2012.
- The Department of Nutrition and Food Sciences in collaboration with the Institute of Child Health in London, World Vision Lebanon, and International Orthodox Christian Charities, conducted an 11-day course, Nutrition in Emergencies.
- An applied HACCP workshop was held in the pilot plant of the NFSC Department between September 11 and October 2, 2012. The workshop was meant to allow students to implement their knowledge in the field of HACCP on real processing lines, processing food, analysis, and writing reports. The workshop was offered by the Sustainable Management Group in collaboration with AUB.
- Rachel Close joined the department as an instructor in dietetics. Close will also assume the role of the Nutrition and Dietetics Coordinated Program Practicum Coordinator.

Personnel

The NFSC Department has thirteen full-time faculty members including four instructors and one lecturer; seven part-time faculty members (total FTE's: 14.67 based on first semester data), one research associate, and seven research assistants. Fifteen graduate assistants were appointed for the first semester, thirteen for the second semester, and three for the summer session. The department has four support staff members. The tables below detail the personnel in the Nutrition and Food Sciences Department:

Full-time Faculty

Nahla Hwalla	Dean, Professor
Ammar Olabi	Chairperson, Associate Professor
Imad Toufeili	Professor
Omar Obeid	Professor
Mohammad Abiad	Assistant Professor
Hala Ghattas	Assistant Professor
Zeina Kassaiy	Associate Professor
Farah Naja	Assistant Professor
Lara Nasreddine	Assistant Professor, Coordinator of Undergraduate Studies in Nutrition and Dietetics
Lama Mattar (until July 31, 2012)	Lecturer
Marie-Claire Chamieh	Instructor
Basma Hamadeh	Instructor
Nadine Mikati (until July 31, 2012)	Instructor
Dima El Halabi	Instructor
Rachel Close (effective September 1, 2012)	Instructor

Part-time Faculty

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

Research Associate

Nada Adra

Research Assistants

Sara Farhat (on grant)
Monia Hamdan
Reem Hamzeh (on grant)
Ghina Kaddour
Melannie Mattar (on grant)
Dareen Shatila (on grant)
Katherine Jaafar

Graduate Assistants

Fall 2011-2012

Graduate Assistant	Major
Sara Adwan	Nutrition
Nathalie Joy Malek	Food Technology
Nivine Bachir	Nutrition
Joanna Abou Rizk	Nutrition
Nivine El Alami	Nutrition
Jana Hazim	Nutrition
Jinane Makki	Nutrition
Hiba Nashef	Food Technology
Ruba Hajj-Ahmad	Food Technology
Katherine Jaafar	Food Technology
Patricia Moghames	Nutrition
Baria Kishli	Nutrition
Maya Mokdad	Food Technology
Nadera Hamdar	Food Technology
Talar Fossian	Nutrition

Spring 2011-2012

Graduate Assistant	Major
Hiba Nashef	Food Technology
Ruba Hajja Ahmad	Food Technology
Nathalie Joy Malek	Food Technology
Joanna Abou-Rizk	Nutrition
Katherine Jaafar	Food Technology
Jana Hazim	Nutrition
Jinane Makki	Nutrition
Nadera Hamdar	Nutrition
Maya Mokdad	Food Technology
Omar Dib	Food Technology
Rita Helou	Nutrition
Rasha Zgheib	Nutrition
Mariam El Halabi	Nutrition

Summer 2011-2012

Graduate Assistant	Major
Joanna Abou-Rizk	Nutrition
Patricia Moghames	Nutrition
Joanna El Hayek	Nutrition

Support Staff

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

Teaching

Student Enrollment in Courses

Fall 2011-2012

Course	Credits	Enrollment	Instructor
NFSC 220	3	41	C. Murad
NFSC 221	3	51	L. Mattar
NFSC 222	3	42	H. Ghattas
NFSC 240	2	38	M-C. Chamieh
NFSC 252	3	19	Y. Habbal
NFSC 261	3	26	J. Natour
NFSC 265	3	28	Toufeili
NFSC 267	2	25	B. Hamadeh
NFSC 274	3	28	O. Obeid
NFSC 277	3	35	Z. Kassaify
NFSC 282	3	29	Z. Kassaify
NFSC 283	3	18	H. Ghattas
NFSC 284 A	1	18	D. El Halabi
NFSC 287	3	15	Y. Habbal
NFSC 288	3	47	A. Olabi/B. Hamadeh
NFSC 290	3	13	D. El Halabi
NFSC 292	3	36	Barhoumi/P. Karam
NFSC 294	1	35	N. Mikati
NFSC 296	1	29	L. Nasreddine/D. El Halabi
NFSC 298F	14	18	N. Mikati
NFSC 299	2	32	F. Naja/Z. Kassaify
NFSC 300 B	2	2	O. Obeid
NFSC 300 C	3	4	A. Olabi/F. Naja/I. Toufeili
NFSC 301	3	13	H. Tamim
NFSC 307	3	4	F. Naja
NFSC 314	3	12	O. Obeid
NFSC 371	3	8	H. Ismail
NFSC 395	1	5	A. Olabi

Spring 2011-2012

Course	Credits	Enrollment	Instructor
NFSC 220	3	49	C. Mourad
NFSC 221	3	38	L. Mattar
NFSC 261	3	26	J. Natour
NFSC 265	3	30	I. Toufeili
NFSC 267	2	29	B. Hamadeh
NFSC 272	2	22	S. Ghandour
NFSC 278	3	22	Z. Kassaify
NFSC 284 B	1	18	D. El Halabi
NFSC 285	3	39	O. Obeid/M-C. Chamieh
NFSC 287	2	34	M. Abiad
NFSC 289	1	47	B. Hamadeh/H. Daroub
NFSC 290	3	23	N. Mikati
NFSC 291	3	24	M. Abiad
NFSC 293	3	27	L. Nasreddine
NFSC 295	1	27	D. El Halabi
NFSC 296	1	36	M-C. Chamieh/L. Mattar
NFSC 298S	14	18	N. Mikati
NFSC 299	2	29	I. Toufeili/A. Olabi/Z. Kassaify/ L. Nasreddine/ M. Abiad/ O. Obeid/H. Ghattas
NFSC 300 A	1	1	L. Nasreddine
NFSC 300 B	2	4	M. Abiad/L. Nasreddine/A. Olabi
NFSC 300 C	3	6	L. Nasreddine/ I. Toufeili/ O. Obeid/F. Naja
NFSC 305	3	10	Olabi
NFSC 306	3	10	H. Ghattas
NFSC 308	3	7	L. Nasreddine/L. Mattar
NFSC 310	3	10	Toufeili
NFSC 315	3	17	O. Obeid
NFSC 351	3	17	Z. Kassaify
NFSC 395	1	5	H. Ghattas

Summer 2011-2012

Course	Credits	Enrollment	Instructor
NFSC 261	3	28	I. Toufeili
NFSC 280	1	21	I. Toufeili
NFSC 296	1	1	A. Olabi
NFSC 299	1	1	O. Obeid
NFSC 300 A	1	4	L. Nasreddine/I. Toufeili/O. Obeid
NFSC 300 B	2	4	L. Nasreddine/I. Toufeili/O. Obeid
NFSC 395	1	1	I. Toufeili

Completed Theses

A total of seventeen theses were completed in 2011-2012 as below:

- Dania Hariri, Nahla Hwalla (adviser). Vitamin D status in a random sample of the adult Lebanese population and its association with cardio metabolic risk factors
- Nadine Nehme, Mohamad Abiad (adviser). Consumer acceptability of different baklava packaging
- Batoul Saffieddine, Hala Ghattas (adviser). Breastfeeding support given by health care providers and society: A qualitative study investigating perspectives of women living in the southern suburbs of Beirut
- Lama Khalil, Hala Ghattas (adviser). The relationship between adiposity, anemia, and inflammatory markers in Lebanese children and adolescents
- Maya Salem, Farah Naja (adviser). Association between dietary patterns and the risk of type 2 diabetes mellitus: a case control study
- Chrystel Akl, Farah Naja (adviser). Prevalence and determinants of overweight and obesity in a nationally representative sample of Lebanese children 5-12 years old
- Sara Adwan, Lara Nasreddine (adviser). Effect of meal glycemic index on postprandial response of insulin, glucose, and triglyceride and subjective assessment of appetite
- Christelle Abi Rached, Omar Obeid (adviser). The effect of phosphorus preload on postprandial glycemic and insulinemic responses in healthy adults

- Nancy Zeitouny, Omar Obeid (adviser). Effect of preload ingestion of branched chain amino acids and tryptophan on subjective satiety and subsequent energy intake in adults
- Marina Mefleh, Omar Obeid (adviser). The effect of phosphorus preloads on subjective satiety and subsequent energy intake
- Loulwa Kalache, Ammar Olabi (adviser). Shelf life tracking of a commercial ready-to- drink UHT chocolate milk
- Sibel El Labban, Ammar Olabi (adviser). The effect of roux-en-y gastric bypass and sleeve gastrectomy surgery on food preferences, dietary intake, and gastrointestinal symptoms in post-surgical morbidly obese subjects
- Nadine Srour, Ammar Olabi (adviser). Developing a carob milk-based beverage using different varieties of Lebanese carob pods and assessing its chemical and sensory properties
- Francine Francis, Ammar Olabi (adviser). Sensory and biochemical evaluation of raw and processed chicory – hindbeh (cichorium intybus) during frozen storage
- Hiba El Rouaiheb, Imad Toufeili (adviser). Factors affecting the purchase intent of Lebanese extra virgin olive oil
- Janay Haidar, Imad Toufeili(adviser). Relationships of selected biochemical and physicochemical parameters to the antioxidant activities of Lebanese honeys
- Nisrine Abou Mehdi, Imad Toufeili(adviser). Roles of intrinsic and extrinsic product attributes in the purchase intent of honey

Research Funding

Internal Grants

Seven members of the department received URB grants as below:

University Research Board (URB)

- Abiad, Mohammad. The Impact of Various Escherchia Coli Strains on Methane Gas Production from Farm and Kitchen Waste. (\$9,500)
- Kassaiy, Zeina. Implementation and Viability of Traceability Systems in Small and Medium Dairy Processing Plants. (\$9,500)
- Naja, Farah. Dietary Patterns and their Association with the Metabolic Syndrome and its Components among Lebanese Adults. (\$8,700)

- Nasreddine, Lara. Vitamin D Status in a Random Sample of the Adult Lebanese Population and its Association with Cardiometabolic Risk Factors. (\$8,500)
- Obeid, Omar. The Effects of Phosphorous on Postprandial Serum Lipid Responses in Healthy Subjects. (\$9,000)
- Olabi, Ammar. The Effect of RYGB and SG Surgery on Food Preferences and GI Symptoms in Post-Surgical Morbidly Obese Subjects. (\$8,400)
- Toufeili, Imad. Estimation of the Relative Contributions of Intrinsic and Extrinsic Cues to the Purchase Intent of Honey. (\$7,500)

Local, Regional, and International Grants

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

- Abiad, Mohammad. Consumers' Demand for Mitigating Foodborne Risks and the Role of Awareness Campaigns in Adding Value to Microbiological Safety in Food Markets of Lebanon, LNCSR. - \$ 8,289.12
- Ghattas, Hala. The Effect of a School Feeding Program in Aarsal on Nutritional Status of Children, IDRC/NCC
- Ghattas, Hala (Co-PI). Mapping the Living Conditions of UNHCR Registered Refugees in Lebanon, UNHCR. - \$25,000
- Hwalla , Nahla. Vegetables Seed Trial at AREC, UNIFERT - \$23,000
- Hwalla, Nahla (PI), Ghattas, Hala (Co-PI). Validation of a Lebanese food security assessment tool, WHO-EMRO
- Hwalla, Nahla. The Nestle Healthy Kids Global Programme, Nestle Middle East
- Hwallam, Nahla, Nasreddine, Lara; Naja, Farah; Ghattas, Hala. The Nestle Healthy Kids Partnership, Nestle Middle East
- Hwalla, Nahla and Nasreddine, Lara. Associated Research Unit (ARU) for Undernutrition and Obesity in Lebanon, LNCSR.
- Nahla Hwalla, Nasreddine, Lara; Naja, Farah. Evidence-based Nutrition Intervention Program, Coca Cola Foundation
- Kassaiy, Zeina. Food Safety Knowledge, Attitudes, and Practices of Food Handlers in SME's, Beirut, Lebanon: A Focus on Quantitative Risk Assessments of Pathogens in Ready-to-Eat Salad Vegetables, CNRS
- Obeid, Omar. Premeal Phosphorous Supplementation for Reducing Energy Intake and Body Weight, LNCSR

- Olabi, Ammar. Galaxy Chocolate Milk Shelf Life Study, MARS GCC
- Olabi, Ammar. The Impact of the Current Food Environment on Nutrition and Health: Policy Options to Improve Dietary Diversity, Food Security, Livelihoods, and Ecosystem Management in Lebanon, IDRC/NCC

Publications

Fourteen articles were published in internationally refereed journals by the NFSC members as indicated below:

Internationally Refereed Journals (Corresponding/Senior Author *)

- Chalak, A. and Abiad, M. G.* 2012. How effective is information provision in shaping food safety related purchasing decisions? Evidence from a choice experiment in Lebanon. *Food Quality and Preference* 26: 81-92.
- Chalak A., Hecht, J., Reid, S., and Abiad, M. G.,* 2012. Willingness-to-pay for greenhouse gas reductions: A Bayesian investigation of distributional patterns. *Environmental Science and Policy* 19-20: 147-157.
- Hlais, S., Abou Reslan, D. R., Saredidine, H. K., Nasreddine, L., Taan, G., Azar, S., and Obeid, O. A.* 2012. Effect of lysine, vitamin B6, and carnitine supplementation on lipid profile of male subjects with hypertriglyceridemia: a 12-week, open label, randomized placebo-controlled trial. *Clinical Therapeutics* 34(8):1674-82. <http://dx.doi.org/10.1016/j.clinthera.2012.06.019>.
- Ghazeeri., G. S.,* Awwad, J. T., Alameddine, M., Younes, Z. M., and Naja, F. 2012. Prevalence and determinants of complementary and alternative medicine use among infertile patients in Lebanon: a cross sectional study. *BMC Complement Altern Med.* 20; 12(1):129.
- Kaaki, D., Kebbe Baghdadi, O., Najm, N. E .O., and Olabi, A.* 2012. Preference mapping of commercial labneh products in the Lebanese Market. *The Journal of Dairy Science* 95(2):521-32.
- Kamleh, R., Olabi, A.,* Toufeili, I., Najm, N. E .O., Younis, T., and Ajib, R. 2012. The effect of substitution of NaCl with KCl on physicochemical, microbiological and sensory properties of halloumi cheese. *The Journal of Dairy Science*, March; 95(3):1140-51.
- Musaiger, A. O., Hassan, A. S., and Obeid, O. Nutritional situation in the Arab world. 2012, *Arab Journal of Food and Nutrition*, suppl 1, 97-115.
- Naja, F., Nasreddine, L., Hwalla, N., Moghames, P., Shoaib, H., Fatfat, M., Sibai, A., and Gali-Muhtasib, H.* 2012. Association of H. Pylori infection

with insulin resistance and metabolic syndrome among Lebanese adults. *Helicobacter* (doi: 10.1111/j.1523-5378.2012.00970.x).

- Naja, F., Nasreddine, L., Itani, L., Adra, N., Sibai, A., and Hwalla, N.* 2011. Association between dietary patterns and the metabolic syndrome among Lebanese adults. *European Journal of Nutrition* (doi:10.1007/s00394-011-0291-3).
- Nasreddine, L., Naja, F., Chamieh, M-C., Adra, N., Sibai, A. M., and Hwalla, N.* 2012. Trends in overweight and obesity in Lebanon: Evidence from two national cross-sectional surveys (1997 and 2009). *BMC Public Health*, 12:798 (doi:10.1186/1471-2458-12-798).
- Nasreddine, L., Zeidan, M. N., Naja, F., and Hwalla, N.* 2012. Complementary Feeding in the MENA Region: Practices and Challenges. *Nutrition, Metabolism and Cardiovascular Diseases* 22 (10)(October):793-798.
- Nasreddine, L., Naja, F., Tabet, M., Habbal, M-Z., El-Aily, A., Haikal, C., Sidani, S., Adra, N., and Hwalla, N.* 2012. Obesity is associated with insulin resistance and components of the metabolic syndrome in Lebanese adolescents. *Annals of Human Biology* 39:122-8.
- Nasreddine, L., Naja, F., Hills, A., Kassem, Youssef S., Chahine, J., and Hwalla, N.* 2012. Validity of predictive equations developed to estimate body fat from anthropometry and bioelectrical impedance analysis in 8-10 year-old children. *Clinical Nutrition* 31:364-371.
- Santos, P. H. S., Abiad, M. G.,* Carignano, M. A., and Campanella, O. H., 2012. Viscoelastic properties of di-benzylidene sorbitol (DBS) physical gels at high frequencies. *Rheologica Acta.* 51 (1): 3-11.

Abstracts

- Chalak, A. and Abiad, M., Food choice and safety certification: a mixed logit investigation of the systematic, distributional, and differential influences of information provision. AAEA/EAAE Conference, Food Environment: The Effects of Context on Food Choice, Tufts University, Boston, MA, May 2012.
- El Rouaiheb, H., Chalak, A., Olabi, A., and Toufeili, I. The purchase intent for extra virgin olive oil is markedly influenced by tasting. Presented at the Fifth European Conference, Sensory and Consumer Research, Bern, Switzerland, 2012.
- El-Aily, A., Haikal, C., Tabet, M., Habbal, M. Z., Adra, N., Nasreddine, L., Hwalla, N. Association between obesity and the metabolic syndrome indicators among adolescents in Lebanon. Annual AUB Basic Biomedical Research Day, Beirut, Lebanon, February 25, 2012.

- Francis, F., Olabi, A., and Karam, L. Sensory and biochemical evaluation of raw and processed chicory – hindbeh (*cichorium intybus*) during frozen storage. Abstract presented as a poster in IBSRA/IDRC Retreat, Food and Health in Rural Lebanon: Options to Improve Dietary Diversity, Food Security, Livelihoods, and Ecosystem management, AUB, Beirut, February 17, 2012.
- Ghattas, H., Seyfert, K., Sahyoun, N. R. Food insecurity among Palestinian refugees living in Lebanon: a household survey. Abstract from the Lancet Palestinian Health Alliance Conference. The Lancet on-line, 2012.
- Hwalla, N., Farhat, S., Nasreddine, L. Development of food-based dietary guidelines for children and adolescents in Lebanon. International Conference on Nutrition and Growth, Paris, March 1-3, 2012.
- Hwalla, N., Naja, F., Sibai, A., Adra, N., Karam, S., Nasreddine, L. Prevalence and determinants of overweight and obesity in a national sample of 13-19 year old Lebanese adolescents. Federation of American Societies for Experimental Biology, San Diego, California, USA, April 1-25, 2012.
- Kassaiy, Z. G. Emerging pathogens in beverages. Presented at the Arab Beverages Conference in Jeddah, Saudi Arabia, May 5-6, 2012.
- Kassaiy, Z. G. Food borne pathogens: Sources and prevention. Presented at the International Food Safety Conference at Biel, Beirut, March 21, 2012.
- Kassaiy, Z. G. Emerging pathogens in food: where do we stand? Presented at the Security and Quality Agri-food Business Development, Tripoli, Lebanon, April 26, 27 and 28, 2012.
- Kassaiy, Z. G. Food safety projects and biodiversity. Presented at NCC's end of year gathering, Food and Biodiversity, American University of Beirut, Beirut, Lebanon, December 15, 2011.
- Kassaiy, Z. G., Celine Ajjour, and Mohamad Abiad. Characterization of probiotic properties of lactic acid bacteria isolated from traditional Lebanese Labneh Anbaris. Presented at the International Association for Food Protection Annual Conference, Rhode Island, USA, July 22-25, 2012.
- Kassem-Youssef, S., Chahine, J., Nasreddine, L., Naja, F., Hwalla, N. Comparative analysis of body composition assessment methods in 8-10 year old Lebanese children. Annual AUB Basic Biomedical Research Day, Beirut, Lebanon, February 25, 2012.
- Moghames, P., Gali-Muhtasib, H., Hwalla, N., Sibai, A., Nasreddine, L., Shouaib, H., Fatfat, M., Naja, F. H. Pylori infection in Lebanon: prevalence, risk factors, and association with metabolic syndrome. Annual AUB Basic Biomedical Research Day, Beirut, Lebanon, February 25, 2012.

- Mohamad Abiad and Ali Chalak. Shaping food safety related purchasing decisions: Evidence from a choice experiment in Lebanon. Institute of Food Technologists (IFT) annual meeting scientific program, Las Vegas, NV, June 2012.
- Naja, F., Moussa, D., Nasreddine, L., Alameddine, M. Prevalence and determinants of complementary and alternative medicine use among Lebanese type 2 diabetic patients. World Diabetes Congress, International Diabetes Federation, Dubai, December 4-8, 2011.
- Naja, F., Nasreddine, L., Itani, L., Adra, N., Sibai, A. M., Hwalla, N. A western dietary pattern is associated with increased risk of metabolic syndrome among Lebanese adults. World Diabetes Congress, International Diabetes Federation, Dubai, December 4-8, 2011.
- Naja, F., Nasreddine, L., Salem, M., Itani, L., Zeidan, M., Azar, S., Hwalla, N. Nutritional intake and anthropometric characteristics of adults with type 2 diabetes mellitus in Beirut, Lebanon: A case-control study. World Diabetes Congress, International Diabetes Federation, Dubai, December 4-8, 2011.
- Nasreddine, L., Naja, F., Akl, C., Adra, N., Sibai, A., Hwalla, N. Nutrient intakes among 5-12 year old Lebanese children: A cross-sectional national survey. International Conference on Nutrition and Growth, Paris, March 1-3, 2012.
- Nasreddine, L., Naja, F., Akl, C., Adra, N., Sibai, A., Hwalla, N. Prevalence and determinants of overweight and obesity in a national sample of 5-12 year old Lebanese children. Federation of American Societies for Experimental Biology, San Diego, California, USA, April 21-25, 2012.
- Ayaso, R., Ghattas, H., Abiad, M., and Obeid, O. Meal patterns of rats maintained on tryptophan and lysine supplemented diet. 19th European Congress on Obesity (ECO2012), Lyon, France, May 2012.
- Ayaso, R., H., Ghattas, M., Abiad, O., Obeid, O. Meal patterns of rats maintained on tryptophan and lysine supplemented diet. Obesity Facts 2012: 5 (Suppl 1), 152.

Chapters in Books

- Musaiger, A. O., Ghattas, H., Hassan, A. S., and Obeid, O. Public Health in the Arab World, edited by Samer Jabbour, Rita Giacaman, Marwan Khawaja, Iman Nuwayhid. Published by Cambridge University Press. Hardback | ISBN: 9780521516747 | January 2012. Section III, Chapter 10. Nutrition and Food Ssecurity: The Arab World in Transition.

Reports

- Kassaiy, Z. A report requested by the judicial body, Lebanon, on the hygiene and safety of SeaSweet Patisserie Central Kitchen and interpretation of microbial analysis results. November 2011.
- Ammar Olabi, Imad Toufeili, and Loulwa Kalache. Shelf life tracking of a ready-to drink galaxy UHT chocolate milk stored at different temperatures (62 pages). March 2012.

Services

Mohammad Abiad

Others

- Reviewer for the following journals: *Food and Bioprocess Technology*, *Foodborne Pathogens and Disease*, *Food Biophysics*, and *Journal of Food Engineering Reviews*.
- Reviewer (abstracts and proceedings) for the following conferences and meetings: 2012 AAPS (The American Association of Pharmaceutical Scientists), National Biotechnology Conference, and 2012 AAPS Annual Meeting.
- Judge for the following competition: The Educational Robotics Tournament 2011, organized by First Lego League Challenge.

Hala Ghattas

AUB

- Member of the FAFS Graduate Studies Committee
- Member of the FAFS Library Committee
- Alternate FAFS representative on the Social and Behavioral Sciences Institutional Review Board (IRB)
- Member of the Program Review Committee, Department of Nutrition and Food Sciences
- Coordinator of the Community Nutrition Internship for the Coordinated Program for Nutrition and Dietetics students
- Organizer of nutrition booths at the University Wellness Committee's Fit-a-thon

Others

- Managing editor of *Emerging Themes in Epidemiology*, a BioMed Central, online, open access journal

- Organizer of the Nutrition in Emergencies Regional Training course, American University of Beirut, June 2012

Nahla Hwalla

Others

- Fellow of International Union for Nutritional Sciences (FIUNS)
- Member of the WHO Expert Advisory Panel on Nutrition
- Member of the American Society for Nutrition
- Member of the Middle East and North African Nutrition Association
- Member of the Federation of Asian Nutrition Societies
- Member of the WHO Nutrition Guidance Expert Advisory Group (NUGAG) Sub Group on Diet and Health
- Member of the Columbus Concept Scientific Advisory Board
- American Dietetic Overseas Association Country Representative for Lebanon
- Council member of World Public Health Nutrition Association
- Elected Fellow of International Union for Nutritional Sciences (FIUNS)
- Member of Academic Review Board - Middle East, International Quality Education Foundation (IQEF)
- Editorial board member: *Mediterranean Journal of Nutrition and Metabolism*
- Editorial board member: *International Journal of Food Sciences and Nutrition*
- Editorial board member: *Annals of Nutrition and Metabolism*
- Editorial board member: *Health Education Research*
- Reviewer of Research Articles:
 - *World Health Organization Bulletin*
 - *Nutrition Research*
 - *European Journal of Clinical Nutrition*
- Reviewer of research articles in *Lebanese Science Bulletin*

Zeina Kassaiy

AUB

- Chairperson of the FAFS Student Affairs Committee
- Member of the FAFS Academic and Curriculum Committee

- Member of the FAFS Graduate Studies Committee
- Member of the FAFS Admissions Committee
- Member of the Interfaculty Committee for Capacity Building in Food Security
- Member of the Teaching Excellence Award Committee
- Faculty representative of the University Committee on Student Affairs
- Faculty representative of the Senate Academic Development Committee
- Faculty representative of the University Graduate Studies Board
- Member of the University Senate
- Member of the University Student Faculty Committee
- Member of the NCC Research Committee
- Judge, Graduate Study at AUB. Third Kamal A. Shair Central Research Laboratory Research Conference. AUB, June 4, 2012
- Adviser, Food Science Society
- Member, Steering Committee for the Development of the Doctoral Veterinary Medicine (DVM) Degree Program jointly with the Faculty of Medicine
- Reviewer for University Research Board, AUB

Others

- Affiliate Executive Officer and delegate, International Association for Food Protection (IAFP)
- President of the Lebanese Association for Food Safety
- Member of FSPME (Food Security and Policy for the Middle East) Issam Fares Institute Research group
- Member of NCC (Center for Nature Conservation and Sustainable Futures)
- Member of the Lebanese Army Committee for updating food standards
- Member of the Ministry of Agriculture Committee for fresh and frozen meats and poultry
- Member of UNIDO Food Safety Panel for Food Safety Law
- Reviewer for the CNRS, Lebanon
- Reviewer for the WHO Eastern Mediterranean Health Journal

- Developer and organizer of the Food Safety Certification, ServSafe, offered by the National Restaurant Association Educational Foundation-USA to graduating students twice a year

Farah Naja

AUB

- Member of FAFS Research Committee
- Member of FAFS Graduate Studies Committee
- Member of FAFS Academic and Curriculum Committee
- Member of FAFS Library Committee
- Member of the University Unified Admissions Committee
- Member of the Vascular Medicine Program
- Member of the Population Health and Nutrition Study Group (PHANS)
- Member of the Food Security and Policy in the Middle-East (FSPME)

Others

- Examination Member of National Nutrition Colloquium
- Reviewer of four articles for the following journals: *Nutrition Journal*, *Integrative Cancer Therapies*, *International Journal of Food Sciences and Nutrition*, and *Journal of the American College of Nutrition*

Lara Nasreddine

AUB

- Coordinator of the Nutrition and Dietetics Undergraduate Program
- Member of the FAFS Academic and Curriculum Committee
- Member of the FAFS Admissions Committee
- Full member of the Social and Behavioral Institutional Review Board (IRB)

Others

- Board Member of the National Nutrition Colloquium examining committee
- Reviewer of one article for the *Nutrition Journal* and two articles for the *Journal of Nutrition and Education Behavior*

Omar Obeid

AUB

- Member of FAFS Advisory Committee
- Member of FAFS Strategic Planning Committee
- Member of FAFS Research Committee
- Member of University IRB Committee
- Member of NCC
- Member of PhD Task Force Committee (Biomedical Sciences)
- Member of University Research Board
- Member of Program Review Committee

Others

- Full member of the Nutrition Society, UK
- Member of the executive committee of the Lebanese Association for Nutrition and Food Science
- Member of the Advisory Committee for the Arab Center of Nutrition
- Member of the editorial board: *Arab Journal of Food and Nutrition*
- Member of MENANA (Middle East and North Africa Nutrition Association),
- Reviewer for the following journals: *Eastern Mediterranean Health Journal (EMHJ)*, *Journal of Biological Sciences*
- Member of the Nutrition in Emergencies Training Network (NIETN)
- Member of the Editorial Advisory Board, *Canadian Journal of Clinical Nutrition*

Ammar Olabi

AUB

- Chairperson of NFSC Department
- Member of FAFS Administrative Committee
- Member of FAFS Academic Curriculum Committee
- FAFS Representative on the University Capital Budget Committee
- Member of FAFS Commencement Committee
- Chairperson of NFSC Program Review Committee

- Member of Ad-Hoc Committee for drafting a proposal for the Public Health Nutrition Graduate Program
- Member of Ad-Hoc Committee for non-CP Nutrition Internship
- Member of Ad-Hoc Committee for Food Science and Management Junior Internship
- Departmental representative for Learning Outcomes course
- FAFS representative on the Second Tenure Task Force
- Member of the University Food Services Committee
- Member of the Food Security and Policy in the Middle East Program
- Member of NCC (Nature Conservation Center for Sustainable Futures)

Others

- Member of the Ministry of Agriculture (Committee for Milk and Milk Products)
- Member of the Ministry of Agriculture (Agro Industry Committee)
- Member of the National Codex Alimentarius Committee
- Reviewer for the *Journal of Food Science*
- Reviewer for the *Journal of Dairy Science*
- Member of the Institute of Food Technologists (Sensory and Quality Assurance divisions)
- Member of the American Dairy Science Association

Imad Toufeili

AUB

- Member of FAFS Advisory Committee
- Member of FAFS Graduate Studies Committee
- Member of the University Commencement Committee
- Coordinator of the Graduate Studies Program

Participation in Workshops and Conferences

Mohammad Abiad

- Participated in feasibility study of localized heating and cooling systems totally powered by solar energy. Proceedings of the AIAA JPC/IECEC 2012 Conference (10th International Energy Conversion Engineering Conference, Energy-Efficient and Renewable Energy Systems), Atlanta, Georgia, USA. July 2012.
- Participated in integrating aquaculture with dairy farm waste recycling and irrigation to reduce consumptive freshwater use, alleviate rural poverty, and improve food security. Symposium publication in Water and Energy in Sustainable Food Security, Beirut, Lebanon. December 2011.
- Attended a webinar about sustainability: Step 1 = Better Design. Organized by the Institute of Packaging Professionals (IoPP) and delivered by Kevin Howard, Senior Packaging Consultant, Packnomics LLC. September 2012.
- Attended a seminar, Sustainability in Packaging: Can the Momentum be Sustained? Organized by Kraft Foods (Northfield, Illinois, USA), the Sustainable Packaging Coalition (Charlottesville, Virginia, USA) and Packaging Digest (Oak Brook, Illinois, USA). December 2011.
- Attended seminar entitled Four Key Questions for Designing Great Packages. Organized by Weatherchem Corporation (Twinsburg, Ohio, USA) in collaboration with Packaging World (Schaumburg, Illinois, USA). December 2011.
- Attended seminar entitled Revolution in Motion: Rise of the Machine Automation Controller organized by Omron Industrial Automation in collaboration with Packaging World, Automation World, and Design World. Schaumburg, Illinois, USA. December 2011.
- Attended course, Thermal Analysis and Rheology of Thermosetting Polymers organized by TA Instruments (Schaumburg, Illinois, USA) and Iowa State University (Ames, Iowa, USA), December 2011.
- Attended a forum about sustainability and packaging. Forum organized by the School of Packaging, Michigan State University, East Lansing, Michigan, USA. November 2011.
- Attended forum, critical Research Needs in Food and Packaging Industry organized by the School of Packaging and the Department of Food Science and Human Nutrition, Michigan State University, East Lansing, Michigan, USA. November 2011.

Hala Ghattas

- Participated in conference entitled Food Security, Nutrition and Health in the Arab World: The Case of Marginalised Populations in Lebanon. Presentation at the IFRPI-UN ESCWA conference, Food Secure Arab World, A Roadmap for Policy and Research, Beirut, February 2012.
- Participated in conference entitled Household Food Security among Palestinian Refugees Living in Lebanon - findings from the AUB UNRWA Socioeconomic Survey. Beirut, March 2012.

Nahla Hwalla

- Invited to attend the MENA Nutrition Congress, Morocco, October 21-23, 2011.
- Georgetown University, Qatar. November 13- 14, 2011.
- Attended third meeting of the WHO Nutrition Guidance Expert Advisory Group (NUGAG) Sub-group on Diet and Health. Korea, November 29-December 2, 2011.
- Attended the first RESCAP MED meeting, London, January 25-26, 2012.
- Attended International Conference on Nutrition and Growth and presented an abstract in Paris, March 1-3, 2012.
- Attended Experimental Biology 2012 and presented an abstract entitled "Prevalence and Determinants of Overweight and Obesity in a National Sample of 5-12 Year Old Lebanese Children." San Diego, California, USA, April 21-25, 2012.
- Attended international conference on nutrition and growth and presented an abstract entitled, "Development of food-based dietary guidelines for children and adolescents in Lebanon," in Paris, March 1-3, 2012.
- Invited to attend the Group President Sustainability Awards Ceremony. (Coca-Cola Eurasia and Africa Group). Turkey, May 15, 2012.
- Invited to attend a conference, Dietary Management of Metabolic Syndrome, and presented a lecture, "Prevalence and Correlates of Metabolic Syndrome in the Lebanese Population," Beirut, Lebanon, May 2012.

Zeina Kassaify

- Attended the Dubai International Food Safety Conference/First IAFP Middle Eastern Symposium and received the IAFP affiliate Charter. February 21-23, 2012.

- Attended and presented a seminar, The Use of Real Time PCR, organized by Basilky sal, AUB, December 20, 2011. Attended one day workshop on the inspection of meat and meat products given to the inspectors of the Lebanese Ministry of Economy and Trade, April 20, 2012.
- Attended one day training on the basic food safety practices for IRAQI governmental food service employees in collaboration with AUB-REP. March 12, 2012.
- Presented three guest lectures in Agr 201, AGSC 236, and NFSC 222 during the first semester 2012.

Farah Naja

- Participated in and served as chairperson of a symposium session at the 2nd International Symposium and think tank on breast cancer prevention. International Breast Cancer Network (IBCN). Rennes, France.
- Attended and presented a paper entitled "A Western Dietary Pattern is Associated with Increased Risk of Metabolic Syndrome among Lebanese Adults" at the World Diabetes Congress, International Diabetes Federation, Dubai, November 4-8, 2011.
- Attended and presented a paper entitled "Nutritional Intake and Anthropometric characteristics of Adults with Type 2 Diabetes Mellitus in Beirut, Lebanon: A Case-Control Study." World Diabetes Congress, International Diabetes Federation, Dubai, December 4-8, 2011.
- Attended and presented a paper entitled "Prevalence and Determinants of Complementary and Alternative Medicine Use among Lebanese Type 2 Diabetic Patients." World Diabetes Congress, International Diabetes Federation, Dubai, 4-8 December 4-8, 2011.

Lara Nasreddine

- Attended the Student Orientation Forum and gave a presentation entitled "Graduate Programs at the Department of Nutrition and Food Sciences (AUB)," May 4, 2012. Department of Nutrition, Faculty of Pharmacy, USJ, May 4, 2012.
- Participated as a guest speaker in Agriculture 201 and gave an oral presentation entitled "Public Health Nutrition." Faculty of Agricultural and Food Sciences, AUB, Beirut, Lebanon, May 2012.
- Participated as guest speaker in a graduate course, Epidemiology of Communicable and Non-Communicable Diseases, and gave an oral presentation on obesity/diet/nutrition. Faculty of Health Sciences, AUB, Beirut, Lebanon, March 18, 2011.

- Attended as invited speaker the meeting, "Dietary Salt: Adverse effects on Blood Pressure and Target Organs" and gave a presentation on the dietary salt intake in the Lebanese population. The meeting was organized by Novartis Pharma Services, Inc. in collaboration with the Lebanese Hypertension League. September 11, 2012, Beirut, Lebanon.
- Attended as invited speaker the conference, Dietary Management of Metabolic Syndrome and gave a presentation, "Pathophysiology of the Metabolic Syndrome." American University of Beirut, Lebanon, May 16, 2012.
- Attended Salt Intake Optimization Group Meeting Vascular Medicine Program and gave a presentation, "Strategy for the Optimization of Salt Intake in Lebanon, the Assessment Stage." American University of Beirut, Beirut, Lebanon, March 8, 2012..
- Attended as invited speaker a seminar organized by the Hariri School of Nursing Research Committee and gave a presentation, "Dietary Exposure to Selected Pesticide Residues in Lebanon." American University of Beirut, Beirut, Lebanon, March 7, 2012..
- Attended the dissemination of the first Associated Research Unit (ARU), "Undernutrition and Obesity in Lebanon," and gave a presentation on the prevalence and determinants of underweight and obesity in the Lebanese population, and the magnitude of change in obesity prevalence over the past decade. American University of Beirut, Lebanon, January 20, 2012.
- Attended as invited speaker the conference, Updates in Nutritional Management of Diabetics and Elderly and gave a presentation, "Obesity as a Risk Factor for Diabetes in the MENA Region." The conference was organized by the University of Jordan and Abbott Nutrition, Amman, Jordan, November 23-24, 2011.
- Attended IAEA Technical Meeting, New Developments in Nuclear Techniques in Nutrition" and Consultants' Meeting, Quality Assurance in Stable Isotope Techniques in Nutrition," IAEA Headquarters, Vienna, Austria, September 26-28, 2011.
- Participated in the Body Composition course of the International Society for Clinical Densitometry (ISCD), December 1, Beirut, Lebanon.
- Participated in Course Learning Outcomes Workshop (CTL), American University of Beirut, Lebanon, October 15 and 22, 2011.

Omar Obeid

- Attended the WHO/FFI joint harmonization workshop for wheat and maize flour fortification in partnership with cdc, gain and mi. Amman, Jordan, February 22-23, 2012.
- Attended and presented a lecture, "Diet and Autism— Accepting Difference," at the Sultan Qaboos University College of Medicine and Health Science. March 21, 2012.
- Attended and presented a lecture, "Malnutrition in Adolescents and Children: The Hidden Deficiencies," at the second Gulf Conference for Nutrition of Children and Adolescents, Sharjah, UAE, April 23-25, 2012.
- Attended the European Congress of Obesity, Lyon, France, May 9-12, 2012.
- Organized a conference, Dietary Management of Metabolic Syndrome, May 16-17, 2012. The conference was held at AUB in collaboration with AUBMC and LAND, and was mainly sponsored by Abbott.
- Participated in an 11-day course, Nutrition in Emergencies, in Beirut. June 4-15, 2012.

Ammar Olabi

- Attended the Learning Outcomes Center of Teaching and Learning Workshop. October 15 and October 22, 2011.
- Gave as an invited guest a presentation, "Learning Outcomes at FAS and FAFS: Process and Success Stories," to FAFS and FAS chairpersons and PLO Committee faculty members, March 8, 2012.

Imad Toufeili

- Attended the Fifth European Conference on Sensory and Consumer Research, Bern, Switzerland, 2012.

Consultancies

Mohammad Abiad

- Sonaco s.a.r.l. – Al-Rabih, Ghefrine, Byblos, Lebanon, February 2012. Consulting on US Food and Drug Administration (FDA) compliance for low-acid and acidified canned food. Developed heat penetration profiles requiring processing conditions for several products.
- Al-Rifai Roastery, January 2012, Corniche Al Mazraa, Beirut, Lebanon. Consulted on packaging solutions for roasted nuts and shelf-life evaluation.

Hala Ghattas

- IOCC Capacity Building in Nutrition in Emergencies for Syrian health workers, Beirut, June 2012.
- IOCC Training-of-trainers Workshop for Lebanese health care workers on nutrition in emergencies, AREC, July-August 2012.

Zeina Kassaify

- Inspection and microbial analysis report for Main Street, November 2011.
- Inspection and microbial analysis report for Sofil Catering, November 2011.
- Prepared report on the microbiological analysis of various samples provided by Raei Hospital, Saida, Lebanon, October 2011.
- Prepared report on the microbiological analysis of water and food samples provided by Skateboard Group, January 2012.
- Prepared report on the microbiological analysis of water samples provided by Dr. Nadim Farajalla, November 2011.
- Prepared three reports on the microbiological analysis of various samples provided by Roadster Diner, December 2011 and January and February 2012.

Farah Naja

- Issam Fares Institute. Project title, "Infant and Maternal Nutrition in Rural Lebanon and Barriers to Infant Food Security." Consultancy agreement involved data analysis and interpretation pertinent to access to food, barriers to food security, and coping strategies. Seven days in October/November 2011.

Lara Nasreddine

- Infant and Maternal Nutrition in Rural Lebanon, August 2011, Issam Fares Institute and International Fund for Agricultural Development (IFAD).

Ammar Olabi

- Olabi, A. Qatrah Beverage Product Innovation Competition--2011 Results Report.
- Iraq PM Public Officials Advancement Workshop. Acted as the workshop departmental coordinator with REP and taught/trained for one day on two occasions: March 15 and April 20, 2012.
- Development of condiments using pomegranate concentrate. NFSC, March 16, 2012-September 16, 2012.

Imad Toufeili

- Member of the Jury of Qatrah Beverage Product Innovation Competition 2011.
- Development of condiments using pomegranate concentrate, March 16, 2012-September 16, 2012.

Media Appearances

Hala Ghattas

- An article, "Arab Diets, Feast and Famine." *The Economist*, March 2012. <http://www.economist.com/node/21549018>

Zeina Kassaify

- Article, "Emerging Spoilage and Pathogenic Microorganisms Incur Heavy Losses for Bottling Companies" in *Alsharq Alawsat*, Thursday, May 10, 2012, p. 34.
- Article, "Food Safety in Lebanon," *Executive Magazine*, June 2012.
- Article, "What to Eat in Lebanon: Food Safety Issues," in the *Annahar* newspaper, March 14, 2012.
- Interview about the food safety situation in Lebanon on the evening news, *Tele Liban*, March 14, 2012.
- Interview about the food safety situation in Lebanon on the evening news, LBCI, March 13, 2012.
- Episode about water safety in Lebanon on the program "Kalam l Ness," LBCI, October 27, 2011.

Farah Naja

- Interview with *Al Aqsa TV* regarding nutrition during winter and cold climate.
- An interview with *The Daily Star* regarding body image and influence of peers and the media.
- Interview with *al Amen* newspaper regarding healthy eating habits.

Lara Nasreddine

- Radio interview with Jordan Radio about obesity as a risk factor for diabetes in the MENA region.
- Article, "Children at Risk: the Hidden Dangers of Flab," *MainGate*, pp. 13-14, Fall 2011, American University of Beirut.

Certificates

Zeina Kassaify

- ServSafe for Food Safety

Strategic Challenges

- The NFSC Department is streamlining the process of providing analytical services for the food industry. Potential services and their prices will be posted on the new NFSC website and will be communicated to potential users.
- Develop new courses on packaging, labeling, traceability, and related topics.
- Organize a food packaging short-course in collaboration with Michigan State University and the International Packaging Institute (IPI).
- The challenges are many as laboratory equipment is scarce at AUB, especially in the area of research related to packaging of traditional and local foods, food packaging design and development, active packaging systems, biodegradation and recycling of agro-food wastes and food processing by-products, rheology of polymers, foods and biomaterials; food labeling and health claims as related to consumer perception and willingness to pay, and consumer research on safe foods.
- The department has additional needs for staff/research assistant support, especially with the advent of the PhD program, the potential graduate degree in Public Health Nutrition and the current continuous activities in the food microbiology area.
- Space needs are a recurrent issue and are restricted not only to the department but rather to the whole Faculty.
- The department has witnessed over this year major administrative activities that have required the contribution of a significant proportion of its faculty members to such matters as the finalization and submission of the self-study to the Accreditation Council for Education in Nutrition and Dietetics (ACEND), the preparation of the self-study for the Departmental Program Review, the restructuring of the Food Science and Management Junior Summer Internship, and the preparation of a draft proposal for a graduate degree in Public Health Nutrition. All these activities, although only conducted every few years, have sometimes taken several faculty members away from their focus on research activities.

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