Dear Alumni and Friends,

It is a pleasure to share with you the 2010–11 Faculty of Agricultural and Food Sciences’ (FAFS) Annual Report. The report is a snapshot of the Faculty’s accomplishments over the past year and showcases the major initiatives and developments that have taken place, illustrating FAFS's commitment to higher levels of excellence in teaching, research and outreach.

During this academic year, FAFS engaged in a dynamic strategic planning process revisiting its vision, mission and goals to guide the Faculty in its growth over the next five years. The new mission statement emphasizes commitment to human health and wellbeing through research, an aspiration for providing excellence in education and service that extends to the community, the region and the world.

In parallel to active strategic planning, the Faculty had the chance to implement a myriad of initiatives and programs focused on its commitment to high quality learning. In pursuit of enhancing existing programs, FAFS successfully developed and implemented program learning outcome measures for its seven undergraduate programs. The Faculty also secured approval from the Commission on Accreditation for Dietetic Education (CADE) to conduct an onsite evaluation for the accreditation of its Coordinated Program in Nutrition and Dietetics. In addition, the Landscape Design and Ecosystem Management department (LDEM) has secured involvement of the international community (International Federation of Landscape Architects (IFLA), the European Federation of Landscape Architects (EFLA) and the American Society of Landscape Architects (ASLA) in modifying its LDEM undergraduate program and establishing a new Masters in Landscape Architecture (MLA).

The Faculty also moved forward on new academic initiatives where a PhD in Biomedical Sciences/Nutrition, jointly with the Faculty of Medicine, was approved by Board of Trustees, and an MS in Rural Community Development (RCODE) was approved by the Faculty. In addition, FAFS has moved for establishing degree and non-degree programs in Food Security including a professional Master’s program in collaboration with the Lebanese National Center for Scientific Research (CNRS), the International Center for Agricultural Research (ICARDA) and the International Centre for Advanced Mediterranean Agronomic Studies (CIHEAM). This step comes as a response to the growing regional and international concerns over food insecurity, poverty and food safety and complements FAFS's engagement in pioneering initiatives that contribute to enhancing agricultural and food producing practices.
FAFS research productivity has increased consistently. This year faculty research funds have expanded with a total $1,477,059 in new awards, the bulk of which are from international agencies. Some 83 publications have been produced in the form of refereed articles in international journals, abstracts and proceedings, books and book chapters. In addition, the faculty organized many conferences and seminars tackling issues of regional and global importance under the themes of food security, food safety and human wellbeing in collaboration and partnership with national and international organizations such as the International Fund for Agricultural Development (IFAD), the International Development Research Center (IDRC), the Issam Fares Institute (IFI), ICARDA, CIHEAM-IAMB and CNRS-Lebanon. Main events included a Regional Conference on Food Security in the Middle East and North Africa: The Role of Research and Academic Institutions, a seminar on Challenges of Rural Poverty in the Middle East and North Africa (AGSC) and a symposium on Consumer Protection and Food Safety.

In parallel to its commitment to excellence in education and research, the Faculty’s engagement in outreach is highlighted by many activities of significance to the local and international community including native tree planting, animal welfare, balanced and sensible nutrition, urban greening, and conservation agriculture.

The details of these numerous achievements and others are outlined in the report.

Nahla Hwalla
Dean, FAFS
Table of Contents

Preface 3

I. Office of the Dean 11
A. Non-Academic Personnel 12
B. Standing Committees 13
   The Administrative Committee 13
   The Advisory Committee 14
   Academic and Curriculum Studies Committee 15
   The Admissions Committee 17
   The Graduate Studies Committee 18
   The Research Committee 20
   The Library Committee 21
   The Student Affairs Committee 22
C. University Committees 23
   University Library Committee 23
   Senate Committee on General Education 24
D. Fund Raising and Endowment Funds 24

II. The Faculty 27
A. Academic Matters 28
   Faculty Recruitment and Count 28
   Academic Appointments and Leave With Pay 28
   Research Grants and Service Contracts 29
   Visiting URB Scholars 29
   Accreditation and Program Review 29
   Faculty Professional Activities 30
   Faculty Meetings 30
B. Student Statistics 31
   Student Enrollment 2010-11 31
   Historical Perspective 2010-11 32
   Student Admission 2010-11 33
   Graduation 2010-11 36
C. Centers and Units 37
   Agricultural Research and Education Center (AREC) 37
   Environment and Sustainable Development Unit (ESDU) 40

III. Departmental Reports 45
A. Department of Agricultural Sciences 46
   Highlights 46
   Personnel 47
   Teaching 49
   Completed Theses 51
   Research Funding 51
   Publications 53
   Services 56
   Participation in Workshops and Conferences 59
   Consultancies 62
   Strategic Challenges 62
B. Department of Animal and Veterinary Sciences 63
   Highlights 63
   Personnel 64
   Teaching 65
   Completed Theses 66
   Research Funding 66
   Publications 67
   Services 69
   Participation in Workshops and Conferences 72
   Strategic Challenges 73
C. Department of Landscape Design and Ecosystem Management 74
   Highlights 74
   Personnel 76
   Teaching 78
   Completed Theses 79
   Research Funding 79
   Publications 80
   Services 82
   Participation in Workshops and Conferences 84
   Consultancies 85
   Strategic Challenges 86
D. Department of Nutrition and Food Sciences 86
   Highlights 86
   Personnel 87
   Teaching 90
   Completed Theses 93
   Research Funding 94
I. Office of the Dean
A. Non-Academic Personnel

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

Table 1: Non-Academic Personnel

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fares, Mohamad</td>
<td>IT Manager</td>
</tr>
<tr>
<td>Haddad, Tharwat</td>
<td>Students Record Officer</td>
</tr>
<tr>
<td>Houri, Laila</td>
<td>Financial Officer</td>
</tr>
<tr>
<td>Khoury, Wafa</td>
<td>Executive Officer</td>
</tr>
<tr>
<td>Nabhani Zeidan, Maya</td>
<td>Program Review and Accreditation Officer</td>
</tr>
<tr>
<td></td>
<td>(joined Dean’s Office on September 7, 2011)</td>
</tr>
<tr>
<td>Bilal, Lisa</td>
<td>Administrative Assistant (resigned August 15, 2011)</td>
</tr>
<tr>
<td>Nakib, Nisrine</td>
<td>Secretary</td>
</tr>
<tr>
<td>Koubayssi, Rabia</td>
<td>Assistant for Student Services</td>
</tr>
<tr>
<td>Haidar, Imad</td>
<td>Junior Clerk</td>
</tr>
</tbody>
</table>

Major Activities of FAFS Dean’s Office

- FAFS engaged in a dynamic strategic planning process that culminated in the completion of the Faculty’s 2012–17 strategic plan.

- FAFS evaluated the effectiveness of its programs on student learning after successfully developing and implementing program learning outcome measures for its seven undergraduate programs. Findings on the AY 2010–11 assessment were compiled in a report submitted to the University administration.

- FAFS worked towards reconfiguring and creating usable space in the existing facilities at the Faculty. This resulted in establishing a video conferencing room to accommodate the needs of faculty and students as well as the renovation and refurbishment of the FAFS student section and the graduate assistant room at the NFSC department.

- The FAFS Career Center website was upgraded and improved to better serve students by expanding its database of companies, advertising announcements on upcoming job fairs and special employment days, and by featuring links on how to enhance job skills.

- Several activities were carried out in line with the Faculty’s strategic decision to develop its IT services. These included renovating FAFS’s Computer Lab including the installation of 21 high end computers along with leading industry software packages, and refitting Classroom 102 and the lecture hall at AREC with audiovisual systems. In response to the need to improve the security of our facilities, 24 CCTV surveillance cameras were installed between FAFS’ Beirut campus and at AREC. Additionally, upon the recommendation of the Internal Audit department to improve accounting practices, all sales at the FAFS Pilot Plant and at AREC are now automated and recorded on an electronic system. This enables better tracking of transactions and allows for regular audits on the sales process.

B. Standing Committees

The Administrative Committee

Prepared by: Wafa Khoury, Executive Officer

Membership

Nahla Hwalla, Chairperson
Elie Barbour
Mustapha Haidar
Ammar Olabi
Salma Talhouk
Jad Chaaban, Assistant Dean for Academic Affairs
Lisa Bilal, Secretary

Actions

The committee held nine meetings throughout the academic year 2010–11 and the following actions were taken:

1. FAFS Program Review Schedule

The program review of FAFS departments was discussed and the committee agreed that each department will start the periodic review process for its programs according to the following schedule:

- Nutrition and Food Sciences Department 2010–11
- Agricultural Sciences Department 2011–12
- Landscape and Ecosystem Management Department 2012–13
- Animal and Veterinary Sciences Department 2013–14
2. **Capital Budget**
The Committee members approved priority requests submitted by FAFS departments and AREC for capital budget 2011–12.

3. **Developing Strategic Plans**
The committee members were informed about the initiation of the second strategic planning cycle and chairpersons of departments were asked to revise their strategic plan in accordance with the new AUB's guide for developing strategic plans.

4. **AUB Initiative on Interdisciplinary Programs in Education and Research**
The committee members were made aware of the document on Interdisciplinary Programs in Education and Research at AUB and were asked to review the draft and provide their input and comments on this document.

5. **Graduate Assistants**
The committee members approved the appointment of 40 graduate assistants in the various FAFS departments for the spring and summer sessions 2011.

6. **AREC**
AREC management and activities were discussed and assessed.

**The Advisory Committee**
*Prepared by: Maya Nabhan Zeidan, Program Review and Accreditation Officer*

**Membership**
Nahla Hwalla, Chairperson
Fawwak Sleiman
Isam Bashour
Omar Obeid
Salma Talhouk
Shady Hamadeh
Imad Toufeili

**Actions**
The committee held 17 meetings throughout the period from October 2010–September 2011 and the following actions were taken:

1. **Faculty Research Leave**
   Applications for (11) short term and (2) long term faculty development grants, (2) junior faculty research leaves and (22) special leaves with pay were approved.

   Periodic paid research leave was also granted to Dr. Yusuf Abu Jawdeh for a period of one semester.

2. **New Appointments**
   • The committee recommended the recruitment of nine full-time faculty members for the AY 2010–11 and the fall semester 2011–12: (1) Assistant Professor of Biostatistics in the NFSC department, (1) Visiting Professor of Clinical Nutrition in the NFSC department, (1) full-time Lecturer and (2) full-time Instructors at the NFSC department; (1) Visiting Professor of Horticulture in the AGSC department, (1) Visiting Lecturer and (1) full-time Senior Lecturer of Agribusiness at the AGSC department; (1) Visiting Professor of Veterinary Sciences at the AVSC department. Of these, six offers have been accepted, two have been declined and one is still pending.
   • Departmental recommendations for part-time faculty members’ recruitment were considered and the committee approved the following appointments for the AY 2010–11 and fall semester 2011–12: (10) in the NFSC department; (15) in the LDEM Department, (1) in the AVSC department and (11) in the AGSC Department.
   • Two Preceptor Associates were appointed, on a non-remunerative basis, at the NFSC department.
   • The committee approved the re-appointment of Dr. Salma Talhouk as Chairperson of the LDEM department for three years starting October 2011.
   • FAFS Strategic Planning Committee was formed composed of Drs. Chaaban, Hamadeh, Talhouk, Zurayk and Obeid.

3. **URB Visiting Scholars**
The committee approved departmental recommendations to invite Drs. Joseph Hotchkiss and Diana Twede as URB Visiting Scholars in the NFSC and AGSC departments respectively.

**Academic and Curriculum Studies Committee**
*Prepared by: Rabia Koubayssi, Assistant for Student Services*

**Membership**
Nahla Hwalla, Chairperson
Mohamad Abiad
Elie Barbour
Ali Chalak
Mustafa Haidar
Zeina Kassaify
Lara Nasreddine, Undergraduate ND/Coordinator
6. **Approved new minor in Food Systems**

Dr. Jad Chaaban, Assistant Dean for Academic Affairs, briefed the Committee on the objectives of having a minor in Food Systems. This is in line with the strategic plan of the Faculty whereby students will take one course from each discipline; this will enable students to broaden their horizon with this integrated program. The Committee approved the minor in Food Systems.

7. **Eligible students to go to AREC**

Nineteen students from the Agriculture program and 20 students from the Landscape program were deemed eligible to go to AREC during the spring semester of 2010–11. Classes at AREC were approved to start on February 14, 2011.

8. **Awarding BS degrees**

The Committee recommended to the Faculty to award BS degrees to 132 students distributed as follows: 41 in Nutrition and Dietetics, 20 in Nutrition and Dietetics – Coordinated Program, 32 in Food Science and Management, 18 in Landscape Design and Eco-Management and Diploma of Ingénieur Agricole, 16 in Agriculture and Diploma of Ingénieur Agricole, four in Agribusiness and one in Veterinary Science.

9. **Probation**

Based on AUB probation rules and regulations, the Committee acted to drop three students during academic year 2010–11. Sixteen students were placed on probation. Five students were removed from probation.

10. **New LDEM Curriculum**

The Committee approved the newly revised LDEM curriculum presented by the Chair of LDEM Department. The Committee also approved changing the name of the degree from BS in Landscape Design and Eco-management to BS in Landscape Architecture.

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**The Admissions Committee**

*Prepared by: Tharwat Haddad, Student Records Officer*

**Membership**

Nahla Hwalla, Chairperson
Mohamad Abiad
Mustapha Haidar
Zeina Kassaify
Fawwak Sleiman
Imad Toufeili
Jad Chaaban
Actions
The Committee held four meetings during the academic year 2010–11 and the following actions were taken:

1. **Acceptance of Transfer Students**
   - Spring semester 2010–11: 63 transfer students of which 25 registered.
   - Summer semester 2010–11: 17 transfer students of which two registered.
   - Fall semester 2011–12: 92 transfer students of which 13 registered.

2. **Discussion of New Admission Proposal**
The Admissions Committee unanimously recommended to the Academic and Curriculum Committee to include the below paragraph in the AUB catalogue of AY 2012–13:

   Holders of Lebanese or French Baccalaureate – Literature and Humanities (or a government secondary school certificate, or a certificate or diploma considered by the University to be equivalent to such baccalaureates) are allowed to join all majors in the Faculty of Agricultural and Food Sciences provided they take the following additional courses: CHEM 102 (except Agribusiness students), MATH 203 and BIOL 103, while holders of Lebanese or French Baccalaureate – Sociology and Economics (or a government secondary school certificate, or a certificate or diploma considered by the university to be equivalent to such baccalaureates) are to take CHEM 102 (except Agribusiness students) and BIOL 103.

The Graduate Studies Committee
Prepared by: Rabia Koubayssi, Assistant for Student Services

Membership
Nahla Hwalla, Chairperson
Hala Ghattas
Zeina Kassaify
Farah Naja
Lara Nasreddine
Imad Toufeili
Admission’s Representative
Registrar’s Representative
Rabia Koubayssi, Secretary

Actions
The Committee met seven times during the academic year 2010–2011 and the following actions were taken:

1. **Program of study and thesis titles**
The Committee reviewed and approved the program of study and thesis titles of 32 students distributed as follows: 14 from NUTR, nine from FTC, three from ECOM, two from AGEC, two from PLPT, one from ANML, and one from SOILS.

2. **Acceptance of graduate students**
The Committee accepted 85 students out of 124 at the Master’s program with Nutrition attracting the largest number of applicants. Of the accepted candidates, 28 students were enrolled as follows: 12 Nutrition, 10 Food Technology, two Ecosystem Management, two Agricultural Economics, one Animal Science and one Irrigation.

3. **Petitions**
The Committee received and considered a total of five petitions from students, the majority of which were for changing status from prospective graduate to regular graduate (3), taking a graduate course as prospective graduate (1) and changing from thesis to non-thesis (1).

4. **Establishing a Graduate Council**
The Committee approved the Provost proposal for establishing a Graduate Council.

5. **Graduate Requirements**
The Committee voted to have all departments provide specific courses that prospective graduates need to take in order to satisfy the requirements for a change of status from prospective to regular graduate.

6. **PhD Proposal for Biomedical Sciences**
The Committee approved the proposal recommended by the Nutrition and Food Sciences Department (NFSC) for a joint FM/FAFS degree in Biomedical Sciences/Nutrition.

7. **Comprehensive Exam**
In line with the new unified policy, the Committee approved offering a new required zero credit comprehensive examination course (396) in each discipline effective fall 2011–12.

8. **Awarding the MS degree**
The Committee recommended that the Faculty award the MS degree to 25 students in their respective majors: 16 in Nutrition, three in Food Technology, three in Irrigation, two in Animal Science and one in Agricultural Economics.
The Research Committee

Prepared by: Fawwak Sleiman, Professor

Membership

Yusuf Abou Jawdah, Chairperson (October 1, 2010–February 13, 2011)
Fawwak Sleiman, Chairperson (February 14–September 30, 2011)
Lara Nasreddine, Secretary
Mohammad Farran
Nadim Farajalla
Omar obeid

Actions

During the academic year 2010–11, the research committee held two meetings to establish proposal evaluation guidelines and to act on received research proposals. The following actions were taken:

1. **URB Research Proposals for 2010–11**
   
   The Committee reviewed and evaluated 15 research proposals submitted to URB for funding (Table 2). 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 15 research proposals submitted for funding by URB, only 11 were approved.

   **Table 2. Research proposals submitted to URB for funding during AY 2011–12.**

<table>
<thead>
<tr>
<th>Principal Investigator</th>
<th>Proposal Titles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abiad, Mohamad</td>
<td>The Impact of Various Escherichia coli Strains on Methane Gas Production from Farm and Kitchen Waste</td>
</tr>
<tr>
<td>Abou El Nasr, Yaser</td>
<td>A Network of Ancillary Botanical Gardens for ex-situ Conservation</td>
</tr>
<tr>
<td>Barbour, Elie</td>
<td>Impact of Mutations in Hemaglutinin and Neuraminidase Genes of Lebanese Endemic Avian Influenza on Resistance to Tamiflu Drug</td>
</tr>
<tr>
<td>Bashour, Issam</td>
<td>Antibiotic Uptake by Plants from Manure Amended Soil and its Potential Impact on Human Health</td>
</tr>
<tr>
<td>Chaaban, Jad</td>
<td>The Efficiency of Food Labeling as a Rural Development Policy: The Case of Olive Oil in Lebanon</td>
</tr>
<tr>
<td>Chalak, Ali</td>
<td>How Effective are Environmental and Health Labels at Capturing Market Share? The Case “Zero Nitrate” Labels in the Lebanese Market for Bottled Water in Lebanon</td>
</tr>
</tbody>
</table>

2. **Review of External Research Proposals**
   
   The Committee reviewed and approved five research proposals submitted by FAFS Professors to the Lebanese National Council for Scientific Research (LNCSR).

3. **Review of Research Leave Requests**
   
   The Committee reviewed requests and submitted recommendations for periodic research leave for Drs. Farah Naja and Mohamad Abiad.

The Library Committee

Prepared by: Dr. Sui-Kwong Yau, Professor

Membership

Mohamad Abiad
Ali Chalak
Zeina Kassaify (spring semester)
Farah Naja (fall semester)
Sui-Kwong Yau, Chairperson
Actions

1. Improving Library Services
   In order to improve library services to students, the Library Committee in cooperation with the Science and Agriculture Library conducted two surveys on students using the Library in order to obtain their opinions and suggestions on how the Library can provide improved services. Results of the survey indicated the following: 1) the present library opening hours are agreeable to students, 2) students mainly visit the library for printing and photo-copying, studying and looking up references, 3) printers, PCs, and separated rooms for group work were among additional library facilities students requested.

2. Library Facilities
   The purchase of 10 new PCs and other items for the Agriculture Science Library was approved.

3. University Library Committee
   The Chairperson attended the meetings of the University Library Committee, and sent faculty members relevant information by email when necessary.

Recommendation

The Committee recommended arranging workshops at the beginning of each semester in cooperation with the AUB librarians for graduate students to learn how to use databases to search for relevant literature and how to use the package ‘RefWorks’ to organize, store, and format references for their thesis and research papers.

The Student Affairs Committee

Prepared by: Tharwat Haddad, Student Records Officer

Membership
Mohamad Abiad
Isam Bashour
Nadim Farajalla
Mustafa Haidar, Chairperson
Sui Kwong Yau
Student Affairs Representative
Student Representative
Tharwat Haddad, Secretary

The Committee met four times during the period of October 1, 2010–September 30, 2011, and discussed disciplinary actions and FAFS awards. The following recommendations were made to the Dean:

1. Disciplinary Actions
   The FAFS Student Affairs Committee recommended to the University Disciplinary Committee the expulsion of one student from the Faculty effective February 2011.
   The FAFS Student Affairs Committee recommended giving a Dean’s Warning to two students and a written reprimand to three students.

2. FAFS Awards
   The Committee recommended the following students to receive FAFS awards:
   - Joanna Haidar Award
   - FAFS Alumni Award Mr. Rashad Bou Ghannam
   - Edgcombe Award Mr. Samer Abou Nehme and Ms. Jessica El Asmar
   - Kashadurian Award Mr. Peter Abrahamian
   - Dean Thomas Thuserland Prize for Graduate Excellence Ms. May Khatab, Nutrition,
   - Abdul Hadi Debs Award Ms. Maya Saadeh, Poultry Science
   - Penrose Award
   The Committee reviewed the records of three nominees and recommended all nominees to the Dean, with no order of preference:
   - Tonie Abi Nader
   - Carine Daou
   - Salwa Sabbagh

3. AREC Day
   AREC Day was held on Sunday, May 15, 2011. The event included a wide range of games, multi-cuisine and refreshment selection. About 300 students and guests attended the event this year.

C. University Committees

University Library Committee

Prepared by: Dr. Sui-Kwong Yau, Professor

Actions

Two suggestions from FAFS Library Committee, regarding the physical merger of the Science and Agriculture Library with the Engineering Library, were put forward to the University Library Committee as follows:
   - Discarding old printed journals and using the freed space to accommodate more computers and printers.
• Forming a sub-committee, with invited student members, to give suggestions and comments on the planned merger of the Science and Agriculture Library with the Engineering Library.

• Old books from the Science and Agriculture Library were discarded which created additional space at the library.

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**Senate Committee on General Education**

*Prepared by: Dr. Jad Chaaban, Assistant Professor*

**Actions**

The General Education Committee held three meetings in 2010–11 (October 2010, March 2011, May 2011) in addition to conducting follow-up on diverse GE program activities. The committee performed the following tasks:

• Follow-up on implementing of GE requirements: more GE courses applications were received and reviewed internally. The number of courses approved has increased from about 200 courses in September 2010 to 320 courses in September 2011.

• The GE Requirements section in AUB undergraduate catalogue was updated and published to students on the Office of the Registrar website. GE attributes were added on banner to GE courses. A GE manual was published, and a GE section was added to the The Office of the Provost website.

• All AUB programs were re-evaluated for compliance with the GE requirements. The departments of Landscape Design and Agribusiness are still not compliant.

• Writing Across the Curriculum: intensive writing courses were offered with the support of the Writing Center.

• A GE section was added to the Middle States Commission on Higher Education Accreditation Monitoring Report.

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**D. Fund Raising and Endowment Funds**

Mr. Michael Basrawi, FAFS Alumnus (1957) offered a donation to FAFS Dean’s Hardship Fund. Solidere presented funds in support of the LDEM Symposium at AREC. The AUB President’s Club donated $32,000 towards the renovation and refurbishment of student lounges at AREC.
Recruitment efforts were successful in appointing Dr. Arumugam Kantharajah from the University of Western Sydney as a Visiting Associate Professor of Horticulture and Ms. Karin Seyfert as a full time Lecturer at the AGSC Department as of February 15, 2011. The total number of Faculty Full Time Equivalent (FTEs) for fall 2010–11 was 41.12 distributed as follows:

- 25 FTE (Full-timers) in professorial ranks (eight Assistant, two Associate and 15 Full Professors)
- 7 FTE (Full-timers) in non-professorial ranks (two Lecturers and five Instructors)
- 9.12 FTE (Part-Timers) (4.36 Senior Lecturers and Lecturers; and 4.76 Instructors and Assistant Instructors).

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

Table 3: FTE by Department

<table>
<thead>
<tr>
<th>Department</th>
<th>AGSC</th>
<th>AVSC</th>
<th>LDEM</th>
<th>NFSC</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full-time Professorial Rank</td>
<td>8</td>
<td>4</td>
<td>5</td>
<td>8</td>
<td>25</td>
</tr>
<tr>
<td>Lecturer and Instructor</td>
<td>3</td>
<td>4</td>
<td>7</td>
<td>0</td>
<td>14</td>
</tr>
<tr>
<td>Part-Time</td>
<td>2.62</td>
<td>0.33</td>
<td>4.33</td>
<td>1.84</td>
<td>9.12</td>
</tr>
<tr>
<td>Total</td>
<td>10.62</td>
<td>4.33</td>
<td>12.33</td>
<td>13.84</td>
<td>41.12</td>
</tr>
</tbody>
</table>

In addition, a total of seven full time Research Associates, Senior Research Assistants, and Research Assistants were hired on University funds in the departments of Agricultural Sciences, Animal and Veterinary Sciences, Landscape Design and Ecosystem Management and Nutrition and Food Sciences.

Academic Appointments and Leave With Pay

The following Faculty served as Chairs of FAFS departments:

- Elie Barbour; Animal and Veterinary Sciences department (October 1, 2010–September 30, 2013)
- Mustafa Haidar; Agricultural Sciences department (February 17, 2010–February 16, 2013)
- Ammar Olabi; Nutrition and Food Sciences department (October 1, 2009–September 30, 2012)
A. Academic Matters

Faculty Recruitment and Count

Recruitment efforts were successful in appointing Dr. Arumugam Kantharajah from the University of Western Sydney as a Visiting Associate Professor of Horticulture and Ms. Karin Seyfert as a full time Lecturer at the AGSC Department as of February 15, 2011. The total number of Faculty Full Time Equivalent (FTEs) for fall 2010–11 was 41.12 distributed as follows:

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<td><strong>Full-time</strong> Professoral Rank</td>
<td>8</td>
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<td>3</td>
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- 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 (September 11, 2008–September 30, 2011).

Four professorial lines were advertised in 2011 of which one was filled with a visiting professor in Horticulture in the AGSC department. The other three positions in Biostatistics, Nutrition and Animal and Veterinary Science are still pending.

During 2010–11, three faculty members were on periodic paid research leave (Drs. Youssef Abou Jawdeh and Nadim Farajalla for one semester and Rami Zurayk for one year) and one faculty member was on unpaid leave (Dr. Jala Makhzoumi). Two assistant professors were on maternity leave for the spring semester 2011 (Drs. Hala Ghattas and Farah Naja).

Research Grants and Service Contracts

FAFS was successful in attracting research and service funding from internal, local and international agencies for a total $1,477,059. During this fiscal year, $88,000 of the total amount were from URB (12 faculty members), $72,877 were from local funding (four faculty members) and the remaining $1,316,182 from international funding agencies (six faculty members).

Visiting URB Scholars

Two visiting URB scholars were invited to FAFS Diana Twede and Joseph Hotchkiss, professors at Michigan State University, Professor Twede presented three lectures on the history, economics and logistics of packaging (AGSC), while Professor Hotchkiss gave three talks on new trends, research and education in food packaging (NFSC).

Accreditation and Program Review

FAFS secured approval from the Commission on Accreditation for Dietetics Education (CADE) to conduct an onsite evaluation for the accreditation of its Coordinated Program in Dietetics.

LDEM initiated contacts with the American Society of Landscape Architects (ASLA) and commenced the process of revising its current undergraduate curriculum in accordance to accreditation requirements. LDEM also organized a symposium in collaboration with the International Federation of Landscape Architects (IFLA) and the European Federation of Landscape Architects (EFLA) to discuss the state of the Landscape Architecture profession in Lebanon and the Middle East and the core competencies of the graduates.

FAFS successfully developed and implemented program learning outcome measures for its seven undergraduate programs.
4. Committees Elections
Elections were held on September 27, 2011 and FAFS members were elected to serve on FAFS standing and University committees.

B. Student Statistics

Student Enrollment 2010–11

The total undergraduate student enrollment in the Faculty for the year 2010–11 was 563 distributed as follows: 139 in Agriculture, 137 in Nutrition and Dietetics, 20 in Nutrition and Dietetics-Coordinated Program, 109 in Landscape Design and Ecosystem Management, 95 in Food Science and Management, 55 in Agribusiness, and eight in Veterinary Science. Undergraduate enrollment in 2010–11 decreased by 14 percent with respect to 2009–10 dropping as follows: NTDT (25%) AGRI (21%) and FSMT (14%) possibly related to combined effects of increase in composite score and low yield. Total graduate student enrolment was 115. This increased from 95 students in 2006–07 to 115 in 2010–11. The majority of the graduate enrolment was in the NFSC department (86). In 2010–11 and in order to decrease the burden on NFSC faculty members and to improve the quality of supervision, a purposeful decrease in the graduate admission at NFSC Department was implemented by increasing admission scores. Accordingly, graduate enrolment in 2010–11 was slightly lower than that of 2009–10.

Table 4: Total Student Enrolment in Various FAFS Programs During the Academic Year 2010–11

<table>
<thead>
<tr>
<th>Undergraduate Enrollment</th>
<th>AY 2010–11</th>
</tr>
</thead>
<tbody>
<tr>
<td>NTDT</td>
<td>137</td>
</tr>
<tr>
<td>NTDT-CP (4 years)</td>
<td>20</td>
</tr>
<tr>
<td>FSMT</td>
<td>95</td>
</tr>
<tr>
<td>AGRI (4 years)</td>
<td>139</td>
</tr>
<tr>
<td>AGBU</td>
<td>55</td>
</tr>
<tr>
<td>LDEM (4 years)</td>
<td>109</td>
</tr>
<tr>
<td>VITSC</td>
<td>8</td>
</tr>
<tr>
<td><strong>Total Undergraduate</strong></td>
<td><strong>563</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Graduate Enrollment</th>
</tr>
</thead>
<tbody>
<tr>
<td>NUTR</td>
</tr>
<tr>
<td>FTCH</td>
</tr>
<tr>
<td>AGEC</td>
</tr>
</tbody>
</table>
Undergraduate enrollment increased from 506 in 2006–07 to 563 in 2010–11. By raising its acceptance standards to attract and retain high quality students, FAFS increased its undergraduate average Composite Score from 507 in 2007 to 529 in 2011 which may have caused a 10 percent drop in undergraduate enrollment for year 2010–11. Table 5 shows undergraduate enrollment over the past 5 years.

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

<table>
<thead>
<tr>
<th>Major</th>
<th>06–07</th>
<th>07–08</th>
<th>08–09</th>
<th>09–10</th>
<th>10–11</th>
</tr>
</thead>
<tbody>
<tr>
<td>NTDT</td>
<td>145</td>
<td>177</td>
<td>191</td>
<td>184</td>
<td>137</td>
</tr>
<tr>
<td>NTDT-CP</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>17</td>
<td>20</td>
</tr>
<tr>
<td>FSMT</td>
<td>137</td>
<td>154</td>
<td>129</td>
<td>111</td>
<td>95</td>
</tr>
<tr>
<td>AGRI (4 years)</td>
<td>137</td>
<td>156</td>
<td>202</td>
<td>177</td>
<td>139</td>
</tr>
<tr>
<td>AGBU</td>
<td>n.a.</td>
<td>n.a.</td>
<td>6</td>
<td>62</td>
<td>55</td>
</tr>
<tr>
<td>LDEM (4 years)</td>
<td>87</td>
<td>120</td>
<td>104</td>
<td>98</td>
<td>109</td>
</tr>
<tr>
<td>VTSC</td>
<td>n.a.</td>
<td>n.a.</td>
<td>8</td>
<td>9</td>
<td>8</td>
</tr>
<tr>
<td>Total UG</td>
<td>506</td>
<td>607</td>
<td>640</td>
<td>658</td>
<td>563</td>
</tr>
</tbody>
</table>

Graduate enrollment increased from 95 in 2006–07 to 115 in 2010–11, this increase was mainly in the Nutrition and Food Technology programs. Table 6 shows graduate enrollment over 5 years.

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

<table>
<thead>
<tr>
<th>Major</th>
<th>06–07</th>
<th>07–08</th>
<th>08–09</th>
<th>09–10</th>
<th>10–11</th>
</tr>
</thead>
<tbody>
<tr>
<td>NUTR</td>
<td>32</td>
<td>44</td>
<td>55</td>
<td>61</td>
<td>53</td>
</tr>
<tr>
<td>FTCCH</td>
<td>20</td>
<td>25</td>
<td>24</td>
<td>32</td>
<td>33</td>
</tr>
<tr>
<td>AGEC</td>
<td>6</td>
<td>5</td>
<td>3</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>IRRG</td>
<td>5</td>
<td>6</td>
<td>6</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>PLPT</td>
<td>8</td>
<td>8</td>
<td>5</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>PLSC</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>SOIL</td>
<td>2</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>ECOM</td>
<td>10</td>
<td>3</td>
<td>5</td>
<td>10</td>
<td>9</td>
</tr>
<tr>
<td>ANML</td>
<td>4</td>
<td>2</td>
<td>6</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>POSC</td>
<td>5</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Total Graduate</td>
<td>95</td>
<td>98</td>
<td>111</td>
<td>126</td>
<td>115</td>
</tr>
</tbody>
</table>

Historical Perspective 2010–11

Undergraduate enrollment increased from 506 in 2006–07 to 563 in 2010–11. By raising its acceptance standards to attract and retain high quality students, FAFS increased its undergraduate average Composite Score from 507 in 2007 to 529 in 2011 which may have caused a 10 percent drop in undergraduate enrollment for year 2010–11. Table 5 shows undergraduate enrollment over the past 5 years.

Table 7: Total Student Enrollment

<table>
<thead>
<tr>
<th>First Semester 2010–11</th>
</tr>
</thead>
<tbody>
<tr>
<td>Program</td>
</tr>
<tr>
<td>---------</td>
</tr>
<tr>
<td>NTDT</td>
</tr>
<tr>
<td>FSMT</td>
</tr>
<tr>
<td>AGRI</td>
</tr>
</tbody>
</table>
### Fall, Spring and Summer 2010–11

<table>
<thead>
<tr>
<th>Program</th>
<th>Applications</th>
<th>Admissions</th>
<th>Enrollment</th>
<th>% Admitted out of applicants</th>
<th>Enrollment</th>
<th>% Yield</th>
</tr>
</thead>
<tbody>
<tr>
<td>NUTR</td>
<td>58</td>
<td>31</td>
<td>13</td>
<td>53%</td>
<td>13</td>
<td>42%</td>
</tr>
<tr>
<td>FTCCH</td>
<td>45</td>
<td>25</td>
<td>9</td>
<td>36%</td>
<td>9</td>
<td>36%</td>
</tr>
<tr>
<td>AGEC</td>
<td>6</td>
<td>4</td>
<td>2</td>
<td>100%</td>
<td>2</td>
<td>50%</td>
</tr>
<tr>
<td>IRRG</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>100%</td>
<td>1</td>
<td>50%</td>
</tr>
<tr>
<td>PLSC</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>100%</td>
<td>0</td>
<td>0%</td>
</tr>
</tbody>
</table>

### Undergraduate Transfer Applicants:

During the academic year 2010–11, a total of 495 transfer applications were received at FAFS, of which 182 (37%) were accepted and 58 (32%) of 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>
<thead>
<tr>
<th>Program</th>
<th>Applications</th>
<th>Admissions</th>
<th>Enrollment</th>
<th>% Yield</th>
</tr>
</thead>
<tbody>
<tr>
<td>NUTR</td>
<td>75</td>
<td>26</td>
<td>13</td>
<td>50%</td>
</tr>
<tr>
<td>FSMT</td>
<td>54</td>
<td>18</td>
<td>2</td>
<td>11%</td>
</tr>
<tr>
<td>AGRI</td>
<td>27</td>
<td>16</td>
<td>4</td>
<td>25%</td>
</tr>
<tr>
<td>AGBU</td>
<td>57</td>
<td>22</td>
<td>2</td>
<td>9%</td>
</tr>
<tr>
<td>LDEM</td>
<td>60</td>
<td>12</td>
<td>10</td>
<td>83%</td>
</tr>
<tr>
<td>VTSC</td>
<td>11</td>
<td>7</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>284</strong></td>
<td><strong>101</strong></td>
<td><strong>31</strong></td>
<td><strong>31%</strong></td>
</tr>
</tbody>
</table>

### Graduate Applicants:

During the academic year 2010–11, a total of 132 graduate applications were received at FAFS, of which 79 (60%) were accepted and 27 (34%) of accepted were enrolled. Application received in NUTR (58), FTCCH (45) and ECOM (10) were high but there was a decline of 16 percent, four percent, and 38 percent respectively compared to last year 2009–10. Table 9 shows the numbers and percentages of graduate students who applied to FAFS, those who were admitted and those who actually enrolled.

<table>
<thead>
<tr>
<th>Program</th>
<th>Applications</th>
<th>Admissions</th>
<th>Enrollment</th>
<th>% Admitted out of applicants</th>
<th>Enrollment</th>
<th>% Yield</th>
</tr>
</thead>
<tbody>
<tr>
<td>NUTR</td>
<td>58</td>
<td>31</td>
<td>13</td>
<td>53%</td>
<td>13</td>
<td>42%</td>
</tr>
<tr>
<td>FTCCH</td>
<td>45</td>
<td>25</td>
<td>9</td>
<td>36%</td>
<td>9</td>
<td>36%</td>
</tr>
<tr>
<td>AGEC</td>
<td>6</td>
<td>4</td>
<td>2</td>
<td>100%</td>
<td>2</td>
<td>50%</td>
</tr>
<tr>
<td>IRRG</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>100%</td>
<td>1</td>
<td>50%</td>
</tr>
<tr>
<td>PLSC</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>100%</td>
<td>0</td>
<td>0%</td>
</tr>
</tbody>
</table>
Graduation 2010–11

FAFS graduated 132 undergraduate students in the fields of Nutrition and Dietetics (41), Nutrition and Dietetics – Coordinated Program (20), Food Science and Management (32), Landscape Design and Ecosystem Management (18), Agriculture (16), Agribusiness (4) and Veterinary Science (1). FAFS graduated 36 more undergraduate students in 2010–11 than 2006–07; this increase is mostly due to the introduction of the Nutrition and Dietetics Coordinated program and partly to the new Agribusiness and Veterinary Sciences programs. Many of our undergraduates continue their Master's education within our programs. FAFS also graduated 25 graduate students in the fields of Nutrition (16), Food Technology (3), Irrigation (3), Animal Science (2) and Agricultural Economics (1). The number of master’s graduates averaged 29 students over the last five years. Tables 10 and 11 show the distribution of graduated students among the different FAFS disciplines during past five years.

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

<table>
<thead>
<tr>
<th>Program</th>
<th>Applications</th>
<th>Admissions</th>
<th>% Admitted out of applicants</th>
<th>Enrollment</th>
<th>% Yield</th>
</tr>
</thead>
<tbody>
<tr>
<td>PLPT</td>
<td>1</td>
<td>1</td>
<td>100%</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>SOILS</td>
<td>1</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>ECOM</td>
<td>10</td>
<td>9</td>
<td>90%</td>
<td>1</td>
<td>11%</td>
</tr>
<tr>
<td>ANML</td>
<td>4</td>
<td>3</td>
<td>75%</td>
<td>1</td>
<td>33%</td>
</tr>
<tr>
<td>POSC</td>
<td>2</td>
<td>1</td>
<td>50%</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Total</td>
<td>51</td>
<td>18</td>
<td>2</td>
<td>2</td>
<td>11%</td>
</tr>
</tbody>
</table>

C. Centers and Units

Agricultural Research and Education Center (AREC)

Prepared by: Nicolas El Haddad, AREC Farm and Facilities Manager

Support Staff

There are 36 non-academic employees at AREC as per below distribution:

<table>
<thead>
<tr>
<th>AREC Administration</th>
</tr>
</thead>
<tbody>
<tr>
<td>El-Haddad, Nicolas</td>
</tr>
<tr>
<td>Yazbeck, Mima</td>
</tr>
<tr>
<td>Haji Hasan, Hussein</td>
</tr>
<tr>
<td>Yazbeck, Bilal</td>
</tr>
<tr>
<td>Ghosn, Hisham</td>
</tr>
<tr>
<td>Haidar, Naji</td>
</tr>
<tr>
<td>Haji Hasan, Fuad</td>
</tr>
<tr>
<td>Haji Hasan, Ali G.</td>
</tr>
<tr>
<td>Haji Hasan, Khayrieh</td>
</tr>
</tbody>
</table>
AREC Activities

AREC facilitated faculty research, teaching and service activities as follows:
During the spring and summer semesters a total of 39 students spent their spring and summer sessions at AREC (19 AGRIII and 20 LDEM III). AREC staff continued to assist students in the implementation of their projects and demonstrated the different systems of engines and the use of farm machinery and acquainted them with the different practical farm operations on daily basis.
AREC provided assistance to faculty members and graduate students in the following research projects:


b. Nutritional Values of De-hulled Safflower Meal for Poultry.

c. Biogas Production by Installing a Bio-digester that will Transform the Organic Waste of the Cattle to Methane Gas.

d. Effects of Rotation – Comparing Barley Performance after a Previous Crop of Safflower, Chickpea, or Barley.

e. Conservation Agriculture in Order to Study its Economic and Environment Importance.

f. Potato Tuber Production in Controlled Environment Multispan Greenhouse.

AREC Services

Several workshops were carried out at AREC that aimed at community development and outreach:

- Middle East Water and Livelihoods Initiative workshop with the participation of ICARDA, UC Davis University, Utah State University, Lebanese Agricultural Research Institute, and the American University of Beirut.
- Conservation Agriculture workshop organized by FAFS in collaboration with GIZ organization–Germany.
- Bedouin Nutrition Education and Communication organized by Dr. Hala Ghattas (Assistant Professor, NFSC) and 25 students.
- The Beirut Landscape Symposium with the participation of the international and the European landscape federations.
- Provided AUB pilot plant, Dietary department, Healthy Basket, and Mrs. Carla Mrad’s Diet Center with AREC produce.
The program was initiated in 2007 when ESDU became the seventh center of Urban Agriculture under the RUAF Foundation. In 2010–11 pilot activities were implemented in Sana’a, Yemen and Amman, Jordan and included activities such as training of trainers (local support organizations and farmer leaders), formulation and implementation of projects, and organization of exchange visits between groups of producers. In addition, two Arabic UA magazines issues were issued published and distributed to the MENA region: issue 11 (from English UAM 22) Building Resilient Cities and Issue 12 (from English UAM 23): The Role of Urban Agriculture in Sustainable Nutrient Management. All issues of the magazine are published on the website www.urbanagriculture-mena.org regularly managed and updated by ESDU. Two more issues are in the production process at the time of writing this report. Several publications are expected in 2012.

Networking: Regional Initiative on Capacity Development in Communication for Development (ComDev) in Support of Food Security and Climate Change Adaptation Efforts

In 2008 the Food and Agriculture Organization (FAO) of the United Nations together with ESDU established a portal for communication for practitioners in development in the Near-East region (www.comdev-neareast.org). In 2011, a concept note and a proposal on Effective Communication for Agricultural Research and Extension Systems: Supporting Small-scale Farmers to Achieve Sustainable Integrated Water Management in Mediterranean Countries were developed and submitted to Karianet as a response to a competitive call for innovative applied research concerning knowledge management in rural development in the Middle East and North Africa (MENA) region (in partnership with the International Development Research Centre and the International Fund for Agricultural Development).

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

The project, funded by the International Development Research Center (IDRC), aims at building capacity in evaluation theory and practice in the MENA region. A workshop was organized in Beirut June, 2011 and was attended by five MENA countries (Egypt, Jordan, Morocco, Syria and Tunisia) in addition to Lebanon.

Research study: 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; Akkar, Lebanon

This study initiated in 2011 and funded by Georgetown University, Washington, through its Center for International and Regional Studies at its campus in Doha, Qatar, is assessing existing urban agriculture activities in two low-income neighborhoods in two pilot cities in Lebanon and Jordan respectively.

AREC as Show Case

New techniques in farm production and processing were adopted at AREC:

- Establishing a new composting plant and installing the necessary equipment.
- Installing a new bio-digester to transform the organic waste of the cattle to methane gas.
- Using drip irrigation system for field corn in order to reduce the cost.
- Direct planting of crops in around 55 percent of the total planted area due to its economic and environment importance.
- Applying fertilizers according to the results of soil analysis and crop requirements.
- Analyzing dairy products for bacteria.

Environment and Sustainable Development Unit (ESDU)

Prepared by: Dr. Shadi Hamadeh
Dr. Salwa Tohmé Tawk

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 Tawk, Knowledge Management Officer/ Training and Organizational Development Specialist

Highlights on ESDU activities during 2010–11

During the academic year 2010–11 ESDU was granted around $300,000 from different international donor agencies mainly the International Development Research Centre (IDRC), the RUAF Foundation (Resource Centers on Urban Agriculture and Food Security based in Netherlands), The Food and Agriculture Organization (FAO), and Georgetown University Washington through its Center for International and Regional Studies in Doha, Qatar.

Community Development: From Seed to Table Program

The From Seed to Table (FStT) program aims at facilitating the development of sustainable urban agriculture through the implementation of a value chain approach. It tackles some of the agriculture constraints – lack of support services and appropriate technologies, lack of organization among urban farmers – by supporting poor farmers to develop safe and sustainable production, processing and marketing systems.
New academic program: The RCODE Master of Sciences program in Rural and Community Development

The RCODE program, initially developed in 2003, was updated and is being processed through proper AUB channels. It will hopefully be launched in 2013.
III. Departmental Reports
A. Department of Agricultural Sciences

Prepared by: Dr. Mustapha Haidar, AGSC Chairperson
Ms. Sarah Ezzedine, AGSC Departmental Research Assistant

Highlights
Two new faculty members joined the department in 2010–11, Dr. Arumugam Kantharajah (Ph.D, Technical University of West Berlin, Germany, Visiting Associate Professor) and Dr. Karin Seyfert as full time Lecturer for the spring semester 2011 only. The department will continue to seek candidates to fill a position in Agribusiness Marketing and Management.

A minor in Agriculture second BS degree in Agricultural Sciences and Ingénieur Agricole for Agribusiness students was launched last year.

The 2010–11 academic year witnessed the introduction of summer school for around 50 students from Germany, Jordan, Syria and Lebanon for two weeks at AREC as a part of a summer school training program (II) to strengthen the intercultural dialogue about conservation agriculture between all participants and to promote conservation agriculture in the Arab region. Agriculture students received special attention and were provided with an opportunity to obtain hands-on learning experiences (Experiential Learning Model) through AREC. Students at AREC had the chance to work with the private sector such as Unifert and visited the surrounding AREC community.

Another significant development is the establishment of a new tissue culture lab and the adoption of a conservation system (No-Till) at AREC. The no-till system was also introduced into around 11,000 dunums in different regions of Lebanon. In addition the department produced over 20,000 virus free-mini potato tubers, setting the stage for transferring the technology for seed potato production to the Lebanese private sector.

The manuscript submitted by Dr. Mustapha Haidar received the Constantin Rebeiz Award (CA and CC Rebeiz Award) for Agricultural Research at FAFS.

A space strategy was developed and implemented to optimize the use of space in the department.

Fifty-one courses were offered, 41 undergraduate and 10 graduate courses. Two tutorials and theses were also offered to graduate students. Four students earned an MS degree, three in Irrigation and one in Agricultural Economics. Published research included 10 refereed articles.

Personnel
The AGSC department has eight full time faculty members, one visiting Associate Professor, one full-time lecturer, nine part-time faculty members (total FTE: 10.62 based on first semester data), two senior research assistants (one on research grant), one full time research assistant and seven part-time research assistants appointed on research grant. Ten graduate assistants were appointed for fall, spring and summer semesters.

Personnel in the Agricultural Sciences department:

<table>
<thead>
<tr>
<th>Full-time Faculty</th>
<th>Part-time Faculty</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mustapha Haidar</td>
<td>Efat Abou Fakhr Hammad</td>
</tr>
<tr>
<td>Youssef Jawdeh</td>
<td>Moatasim Sidahmed</td>
</tr>
<tr>
<td>Isam Bashour</td>
<td>Youssef El Khalil</td>
</tr>
<tr>
<td>Kant Kantharajah</td>
<td>Joanna El Aridi</td>
</tr>
<tr>
<td>Jad Chaaban</td>
<td>Hashem El Husseini</td>
</tr>
<tr>
<td>Ali Chalak</td>
<td>Patricia Steir</td>
</tr>
<tr>
<td>Musa Nimah</td>
<td>Rami Ollaik</td>
</tr>
<tr>
<td>Adib Saad</td>
<td>Youssef Doughan</td>
</tr>
<tr>
<td>Sui Kwong Yau</td>
<td>Mohamad El Zein</td>
</tr>
<tr>
<td>Karin Seyfert</td>
<td>Lecturer</td>
</tr>
</tbody>
</table>

Prepared by: Dr. Mustapha Haidar, AGSC Chairperson
Ms. Sarah Ezzedine, AGSC Departmental Research Assistant
Teaching
The Department offered required and elective courses specific to the BS degrees in Agriculture with a Diploma of Ingénieur Agricole and BS in Agribusiness

Student Enrollment in Courses

<table>
<thead>
<tr>
<th>Course</th>
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<td>3</td>
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<td>6</td>
<td>Dr. Chaaban</td>
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<tr>
<td>AGSC 211</td>
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<td>24</td>
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<tr>
<td>AGSC 301</td>
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<tr>
<td>AGSC 301</td>
<td>1.5</td>
<td>7</td>
<td>Dr. Hamadeh</td>
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<tr>
<td>AGSC 204</td>
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<td>Dr. El Aridi</td>
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<td>10</td>
<td>Mr. El Zein</td>
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<tr>
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<td>AGSC 241</td>
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<td>20</td>
<td>Miss Frangieh</td>
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<td>Mr. Ollaik</td>
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Research Assistants

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
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<tbody>
<tr>
<td>Lucia Hanna</td>
<td>Senior Research Assistant</td>
</tr>
<tr>
<td>Hana Sobh</td>
<td>Senior Research Assistant (on grant)</td>
</tr>
<tr>
<td>Alia Sabra</td>
<td>Departmental Research Assistant (May 15, 2011–October 31, 2011)</td>
</tr>
<tr>
<td>Leila Sarkis</td>
<td>Departmental Research Assistant (March 1–April 30, 2011)</td>
</tr>
<tr>
<td>Maan Jawhari</td>
<td>Research Assistant (on grant)</td>
</tr>
<tr>
<td>Manal Al Arab</td>
<td>Research Assistant (on grant)</td>
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<tr>
<td>Nadia Naamani</td>
<td>Research Assistant (on grant)</td>
</tr>
<tr>
<td>Jamil Samsatly</td>
<td>Research Assistant (on grant)</td>
</tr>
<tr>
<td>Rami Salem</td>
<td>Research Assistant (on grant)</td>
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<tr>
<td>Carla Lebbos</td>
<td>Research Assistant (on grant)</td>
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Graduate Assistants

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<tr>
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<tr>
<td>Jamil Hanna Samsatly</td>
<td>Fall 2010</td>
</tr>
<tr>
<td>Rani Joseph Bassil</td>
<td>Fall 2010</td>
</tr>
<tr>
<td>Abbas Hadi Farran</td>
<td>Fall 2010</td>
</tr>
<tr>
<td>Elie Tony Shdeed</td>
<td>Fall 2010</td>
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<tr>
<td>Mohamad Zeid Safieddine</td>
<td>Fall 2010</td>
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<tr>
<td>Pascal Abdallah Harb</td>
<td>Fall 2010, Spring 2011</td>
</tr>
<tr>
<td>Rasha Mohammad Moussawi</td>
<td>Fall 2010, Spring 2011</td>
</tr>
<tr>
<td>Souhad Raafat Abou Zaki</td>
<td>Fall 2010, Spring 2011</td>
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<tr>
<td>Pardie Karamanoukian</td>
<td>Spring 2011</td>
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<td>Mohamad Ali Khalife</td>
<td>Spring, Summer 2011</td>
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### Spring 2010–11

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<td>AGSC 235</td>
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<td>Ms. Sfeir</td>
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<tr>
<td>AGSC 317</td>
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<td>Dr. Farajalla</td>
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### Summer 2010–11

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<td>Dr. Tawk</td>
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<tr>
<td>AGSC 203</td>
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<td>Dr. Yau</td>
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<tr>
<td>AGSC 395</td>
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<td>Dr. Yau</td>
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<tr>
<td>AGSC 231</td>
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### Completed Theses
- Pascale Harb, Jad Chaaban (Adviser), Trade Openness and Growth in the Middle East Region. Spring 2011.
- Carla Jammous, Musa Nimah (Adviser), Water Use for Optimal Water Productivity, Case Study: Southern Litani Basin Lebanon. Fall 2010.

### Research Funding

**Internal Grants**

Three members of the department received URB funds and one member received funds from Issam Fares Institute for Public Policy and International Affairs as below:
Publications

International Refereed Journals (Corresponding/Senior author*)

Ten articles were published in international refereed journals by AGSC faculty members as indicated below:


Book Article or Chapters

Abstracts and Conference Proceedings (Corresponding/Senior author*)


Services

Youssef Abou Jawdeh

AUB
- Member and Chairperson of the FAFS Research Committee.
- Member of the University Research Board.

Others
- Member of the Pesticide Committee, Ministry of Agriculture.
- Member of the Vegetable Committee, Ministry of Agriculture.
- Member of Almond Phytoplasma Committee, Ministry of Agriculture.

Isam Bashour

AUB
- Member of the FAFS Advisory Committee.
- Member of the FAFS Student Affairs Committee.
- Internship for a student from EARTH University for a period of three months (September 26–December 17, 2010).
- Supervised Soil Analysis at AGSC and gave recommendations to farmers Fall 2011.
- Member of the FAFS Administrative Committee (until February 15, 2011).
- Report on Conservation Agriculture in Lebanon (cooperation with GTZ) Fall 2011.

Ali Chalak

AUB
- Member of the FAFS Academic and Curriculum Committee.
- Member of the FAFS Library Committee.
- FAFS Assistant Marshall in Commencement Ceremony.
- Program Learning Outcomes Assessment Plan for the BS in Agriculture.
- Member of the Nature Conservation Center for Sustainable Futures Executive Committee.
- Member of the Food Security and Policy in the Middle East Steering Committee.
- Member of the AUB Web Oversight Committee.
- Member of the AUB Publications Committee.

Jad Chaaban

AUB
- FAFS Assistant Dean for Academic Affairs.
- Member of the FAFS Strategic Planning Committee.
- Coordinator of Undergraduate Studies, Agribusiness Program, FAFS.
- Representative of FAFS to the following AUB committees:
  1- University Program Learning Outcomes Committee
  2- Interfaculty Financial Aid Committee
  3- University Committee on General Education
  4- Internal Review Committee

Others
- Expert, Middle East Youth Initiative, Wolfensohn Center for Development at Brookings and Dubai School of Government (since 2007).
- Associate Researcher, Toulouse School of Economics, GREMAQ–INRA, France (since 2005).

Mustapha Haidar

AUB
- Chairman of the Agricultural Sciences Department, FAFS.
- Member and Chairperson of the FAFS Student Affairs Committee.
- AREC Academic Coordinator.
- Member of the FAFS Admission Committee.
- Member in the FAFS Program Learning Outcomes Committee.
- Agricultural Science Department representative on the Program Learning Outcomes.

Others
- Recipient of the CA and CC Rebeiz Best Research Paper Award 2010.
- Participated in the Executive and Organizing Committee on the Conversation Agriculture, Beirut, April 2011.
• Participated in the Executive and Organizing Committee on the Conversation Agriculture, Amman, Jordan, July 2011.
• Participated and accompanied 10 students from the AGSC department (seven undergraduates and three graduate students) as part of the DAAD (German Academic Exchange Service) Summer School project, University of Applied Sciences in Triesdorf, Germany. 19 September–3 October, 2010.
• Secretary and Treasurer, Arab Plant Protection Society.

Musa Nimah

_AUB_
• Member, Founder and Comptroller of the Friends of Water, Lebanon.
• Member in the FAFS Graduate Student Committee.
• Member in the Extended Advisory Committee at the Faculty of Engineering and Architecture.

_Others_
• Member in the Program Learning Outcomes Committee.
• 40 years of Service Award, Order of Engineering, Lebanon.
• Services as Chair/Convener of Department, and of committees of University Task Forces.

Adib Saad

_AUB_
• Member of Ad Hoc Committee on Sustainable Agriculture Program, AGSC.
• Served as Due Process Monitor to attend the meetings of the OSB Departments and Extended Advisory Committee in the Faculty Promotion process.

_Others_
• Chaired Committees appointed by the National Civil Service Council to examine and recommend qualified agricultural engineers for research positions, technical positions and administrative positions at the Lebanese Agricultural Institute.
• Chaired a Committee appointed by the National Civil Service Council to examine and recommend qualified agricultural engineers for various positions at the Ministry of Agriculture.
• Chaired a Committee appointed by the National Civil Service Council to examine and recommend qualified agricultural engineers for positions at the Ministry of Economy and Trade.
• Chaired a Committee appointed by the National Civil Service Council to examine and recommend qualified teachers for various positions at the Technical Agricultural Schools.

• Executive Secretary of the Agricultural Committee of the International Chamber of Commerce, Lebanon.
• Appointed by the Lebanese Minister of Agriculture as a member of the National Committee on Stone Fruit Trees.
• Appointed by the Lebanese Minister of Agriculture as a member of the National Committee on Pome Fruit Trees.
• Invited Lecturer for one week in a graduate program on IPM of Mediterranean Fruit Tree Crops at the Mediterranean Agronomic Institute of Bari (CIHEAM), Italy.
• Supervising diagnosis of plant diseases as service to farmers and giving recommendations for management.
• Continues to serve as Senior Editor of “Phytopathologia Mediterranea”.

Sui Kwong Yau

_AUB_
• Member and Chairman of the FAFS Library Committee.
• Member of the FAFS Student Affairs Committee.
• Member of the University Library Committee.
• Member of the Expanded Advisory Committee for FHS on promotion.
• Member of the University Ranking Committee.
• Chair of the Sub–committee on AGSC activities at AREC.
• Served as a mentor for the Visiting Associate Professor of Horticulture, Dr. Kantharajah.

_Others_
• Board member of the International Crop Science Society.
• Associate Editor of Crop Science.

Participation in Workshops and Conferences

Youssef Abou Jawdeh

• Attended six workshops on Integrated Pest Management in Tomato given in cooperation with the FAO and the Ministry of Agriculture: Abdeh (North), Baakline, Jbeil (Byblos), Sour (Tyr), Jiyeh and Bekaa; December 2010.
• Attended three workshops on Integrated Pest Management of Greenhouse Crops, Akkar in cooperation with UNDP.
• Attended USAID working group on Whitefly Transmitted Cucurbit begomoviruses. Aqaba, Jordan, January 2–5, 2011.
Mustapha Haidar

- Accompanied 10 students from the AGSC department in the DAAD (German Academic Exchange Service) Summer School which was held in the University of Applied Sciences in Triesdorf, Germany between September 19–October 3, 2010.
- Participated in many workshops in the North and Beq’aa serving the community.
- Attended the Arab Society for Plant Protection executive board meeting in Aleppo, Syria. March 2011.
- Participated in the DAAD workshop preparation on sustainable agriculture, Beirut, April 2011.
- Attended and presented a paper Ion Flux Kinetics in Blue-light Grown Dodder Seedlings at the 11th World Congress on Parasitic Plants, Italy, June 2011.
- Organized and coordinated the Summer School DAAD project to promote conservation agriculture in the Arab world. Sixty students/professors from Germany, Jordan, Syria and Lebanon at AREC, AUB between September 5–7, 2011.

Musa Nimah

- Participated in the workshop about Promoting Conservation Agriculture in the Arab Region – DAAD Project, conducted by AUB, JKI, Hochchore Weihenstephan–Triesdorf University of Applied Science AREC. September, 6–17, 2011.

Jad Chaaban

- Attended and presented a paper at the Workshop on Alternative Livelihoods to Tobacco Farming held at the International Development Research Center (IDRC), Ottawa, Canada, June 2011.
- Attended the National Council for Scientific Research (CNRS) seminar on Air Quality: Economic Impact of Air Pollution, AUB. May 2011.
- Attended the Consumer Protection and Food Safety Symposium held at FAFS. March 2011.
- Attended and presented a paper at the WAAAUUB Second MENA Regional Meeting, held in Damascus, Syria. March 2011.
- Attended the Launching the Results of the AUB–UNRWA Socio-Economic Survey of Palestinian Refugees in Lebanon, AUB. December 2010.
- Attended Sectarianism and Public Expenditure, the UNESCAWA Expert Group Meeting on Governance and Conflict Relapse, Beirut. May 2011
- Attended and presented a paper at the Workshop on Migration in the Arab Region: Causes and Consequences held in Istanbul, Turkey. April 2011.

Mustapha Haidar

- Accompanied 10 students from the AGSC department in the DAAD (German Academic Exchange Service) Summer School which was held in the University of Applied Sciences in Triesdorf, Germany between September 19–October 3, 2010.
- Participated in many workshops in the North and Beq’aa serving the community.
- Attended the Arab Society for Plant Protection executive board meeting in Aleppo, Syria. March 2011.
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- Organized and coordinated the Summer School DAAD project to promote conservation agriculture in the Arab world. Sixty students/professors from Germany, Jordan, Syria and Lebanon at AREC, AUB between September 5–7, 2011.

Musa Nimah

- Participated in the workshop about Promoting Conservation Agriculture in the Arab Region–DAAD Project, conducted by AUB, JKI, Hochchore Weihenstephan–Triesdorf University of Applied Science, AREC, September 4–7, 2011.
- Attended the WLI Extension and Water Management training workshop, University of California at Davis Utah State University, ICARDA, and AUB at AREC. June 2011.
- Attended the Food Security conference in the Middle East and North Africa, AUB, June 2011.
- Attended and presented a paper at the Workshop on Migration in the Arab Region: Causes and Consequences held in Istanbul, Turkey. April 2011.

Adib Saad

- Attended the regional conference on Food Security in the Middle East and North Africa: The Role of Academic and Research Institutions, AUB. June 2–3, 2011.
- Attended the workshop on Developing Hydroponics to Access International Markets. Spring 2011.
The department will have to introduce new sustainable technologies to support agricultural growth; strengthen the adaptation and mitigation to climate change in Lebanon and the region through research, and sustainably introduced technologies; develop a multi-disciplinary research unit where different scientists can work together; fortify the partnership with the private sector, NGOs and regional institutions and empower out-reach activities at AREC. To accomplish these challenges new full time professors in the field of entomology, extension, farm machinery and practices and biotechnology should be recruited together with the allocation of adequate space and support.

B. Department of Animal and Veterinary Sciences

Prepared by: Dr. Elie K. Barbour, Chairperson

Highlights

The Department graduated its first student from the Veterinary Sciences program, with high distinction. This student is now pursuing her studies for a DVM degree in Szent Istvan University in Hungary, based on the Memorandum Of Understanding that the Department has established with this accredited institution.

The Animal and Veterinary Sciences (AVSC) Department was active in the promotion of the BS program in Veterinary Sciences. The faculty at the department participated in a promotion campaign covering around 20 Lebanese high schools during which students were introduced to the new program.

A fundraising activity to solicit funds for the renovation of a barn at AREC for use as laboratories for the new Veterinary Sciences program was organized by Dr. Farran in coordination with Dr. Barbour and the Office of Development at AUB. This activity took place during the Annual Meeting of the World Poultry Science Association, Lebanese Branch, in Rotana Hazmieh on July 23, 2011.

The Department revised and modified the curriculum of the BS in Veterinary Sciences and started its implementation on newly admitted Veterinary Sciences students, effective fall 2011–12. The revision involved the reduction of the social sciences requirements from nine credits to six credits to match the AUB General Education rules. In addition, a six credit Histology course was replaced with a three credit course and two credit courses in clinical chemistry. Finally, the AVSC 206 Clinical Diagnostics (2 cr.) course and a two credit tutorial course were added. The total number of credits of the new curriculum is 102 credits. The impact of these changes will be assessed in the coming academic years through the procedure of Assessment of the Program Learning Outcomes.

The department will have to introduce new sustainable technologies to support agricultural growth; strengthen the adaptation and mitigation to climate change in Lebanon and the region through research, and sustainably introduced technologies; develop a multi-disciplinary research unit where different scientists can work together; fortify the partnership with the private sector, NGOs and regional institutions and empower out-reach activities at AREC. To accomplish these challenges new full time professors in the field of entomology, extension, farm machinery and practices and biotechnology should be recruited together with the allocation of adequate space and support.

Consultancies

Isam Bashour

Ali Chalak
- Judge for the Qatrah Beverage Product Innovation Competition 2010, Arab Beverage Association and the American University of Beirut 2010 and 2011.

Mustapha Haidar
- National Consultant to Undertake a Survey of S. elaeagnifolium in Lebanon, Sponsored by FAO, July 2011.

Strategic Challenges
- After the recent increase in AUB tuition fees, the AGSC department needs to look for innovative mechanisms to attract more undergraduate students, especially those from rural areas, to enroll in the Agriculture Science program in the near future. Curriculum revisions should tackle prominent issues like meeting future climate change mainly water, drought and plant health challenges and choosing the right educational tools to conserve and use water more efficiently.

Sui Kwong Yau
- Participated in the training workshop on ‘Mahara e-portfolios’ organized by ACC for academic uses on May 11, 2011.
- Participated in the workshop organized by ACC on ‘e-portfolios’ for academic uses on April 14, 2011.
- Attended the International Conference on Preparing Agriculture for Climate Change held, in Ludhiana, India, February 6–8, 2011.
- Attended a workshop on team-based learning by Dr. Nathalie Zgheib on October 19, 2010.
- Participated in the Round-Table Technology Aids for Team-Based Learning by Professor Neil Smith on October 21, 2010.

Participated in the Round-Table Technology Aids for Team-Based Learning by Professor Neil Smith on October 21, 2010.
the present curriculum, and working for the establishment of a new MS program in Veterinary Sciences. The Department selected Dr. Ors Petnehazy, from Hungary, for this post who later on declined the offer. The Department is going to launch a new recruitment cycle to fill this position for the next academic year 2012–13.

The Department was active in research and development with two projects funded internally and nine projects funded by external agencies.

The Department faculty managed to produce eight abstracts and proceedings, 12 full articles in peer-reviewed international journals, and two articles in a peer-reviewed local journal.

The Department graduated two students with an MS degree.

Personnel

The AVSC Department has 4.33 FTE’s out of which four are full time faculty members. The Department also employs one senior research assistant and one research assistant who are appointed on research grants. Four 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

<table>
<thead>
<tr>
<th>Name</th>
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<tbody>
<tr>
<td>Elie K. Barbour</td>
<td>Professor, Chairperson</td>
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<tr>
<td>Fawwak T. Sleiman</td>
<td>Professor</td>
</tr>
<tr>
<td>Mohamed T. Farran</td>
<td>Professor</td>
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<td>Shady K. Hamadeh</td>
<td>Professor</td>
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Research Assistants

<table>
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<tr>
<td>Lina Jaber</td>
<td>Senior Research Assistant</td>
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<td>Nadim Rawda</td>
<td>Research Assistant on grant</td>
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Graduate Assistants

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<td>Maya Saadeh</td>
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<td>Tamar Kassabian</td>
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<td>Hamdi Shaar</td>
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Support Staff

<table>
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<tr>
<td>Houssam Shaib</td>
<td>Senior Technician</td>
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Summer 2011

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Completed Theses

- Saade M., Optimization of Sperm Sexing and Gene Characterization in Goats, 2011, Dr. Barbour adviser, Dr. Hamadeh and Dr. Sleiman Committee members. This thesis is awarded the Abdul Hadi Debs Endowment Award for the Academic year 2010–11.
- Kassabian, T., *Escherichia Coli*-Induced Mastitis in Cows of Lebanon: Virulence Genes Frequency and Antimicrobial Resistance Modulation, 2011, Dr. Barbour adviser, Dr. Hamadeh and Dr. Sleiman Committee members.

Research Funding

Internal Grants
Two faculty members received URB grants as below:

University Research Board (URB)


Local, Regional and International Grants
Seven members of the department were successful in attracting national and international grants as below:

- Barbour, Elie. Optimization of Genetic Markers Characterization in Goat’s Sperms: A Prerequisite to Future Selection Strategy. LNCSR.
- 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 a Dietary Herbal Supplement on the Performance and Carcass Quality of Broilers. Phytagonics Ltd.

Publications

Ten articles in international refereed journals were published by the AVSC faculty members as indicated below.

**International Refereed Journal Articles (Corresponding/Senior author*)**


**Completed Theses**

- Hamadeh, Shadi. Urban Agriculture–From Seed to Table. RUAF/IDRC.
- Hamadeh, Shadi. Outcome Mapping: Regional Capacity Building in MENA – Phase II. IDRC.
- Hamadeh, Shadi. Communication for Development. FAO.

Local / Regional Refereed Journal Articles (Corresponding/Senior author*)


Abstracts and conference proceedings (Corresponding/Senior author*)


Services

Elie Barbour

**AUB**

• Member of the FAFS Administrative Committee and the FAFS Academic and Curriculum Committee.

• Chairperson of the Animal and Veterinary Sciences Department.

• Coordinator of AUB–LaSalle Memorandum of Understanding.

• Coordinator of AUB–Szent Istvan University Memorandum of Understanding.

• Establishing Cooperation with El Purpan in France for Exchange of Faculty and Students.

• Pursuing the Cooperation with the Development Office for Fundraising.

• Advisor to all Veterinary Sciences Students.

**Others**

• Editorial Board of *Veterinaria Italiana* and the World Animal Health Organization Journals.

• Technical advisor to Jezzine beneficiary farms (120 farms) Organized and hosted the World Animal Day celebration, in collaboration with BETA organization, on October 4, 2010.

• Organized a meeting with Animals Lebanon, represented by Mr. Jason Mier, on December 22, 2010 in the presence of Professor Hamadeh. It was agreed during that meeting to cooperate on different Animal Welfare issues, including the establishment of regulations with the Ministry of Agriculture for illegal trade of wild animals.

• Organized a meeting between LaSalle University, represented by their coordinator Dr. Afif Abdelnour, and the chairman of the Agricultural Sciences department, Professor Mustafa Haidar, on December 17, 2010, for activating the exchange of Agriculture students and faculty between the two institutions.

• Investigation of disease outbreaks on major poultry farms of Lebanon (NewCastle, Infectious Bronchitis, Infectious Bursal Disease virus).
Mohammad Farran

**AUB**
- Member of the FAFS Research Committee.
- Continued working with AVSC Chairperson and the Director of the Office of Development to promote the Veterinary Science program as a follow up to a previous meeting held on March 29, 2011.
- Promoted the Veterinary Science program in two special presentations to high school students at College de Notre Dame Al-Jamhour on April 16, 2011.
- FAFS representative on the Poultry Committee at the Ministry of Agriculture.
- FAFS Representative on the National Feedstuffs Committee at the Ministry of Agriculture.
- Member on the Faculty of Medicine Expanded Advisory Committee on Promotions.
- Continued in collaboration with Dr. S. K. Yau the work at AREC on rainfed faba beans cultivars (low in toxins) where the seeds could be used as protein sources in poultry rations.
- Organized a fundraising activity for the renovation of barn at AREC to be used as labs for the Veterinary Sciences program. This activity was coordinated with Dr. Barbour and the Office of Development and was included in the Annual Meeting of World Poultry Science Association, Lebanese Branch, July 23, 2011.
- Attended as a supervisory committee member, the PhD thesis defense of Mr. Elie Awwad FEA, AUB.

**Others**
- Helped several animal farmers and crop growers either on individual basis or through NGOs or UN organizations in Lebanon.
- Appeared on New TV (Lilnasr Program) to clarify broiler packaging issue. April 9, 2011.
- 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.
- Advisor to the Speaker of the House on the Parliamentary Committee for Agriculture and Tourism.
- Reviewer for National Research Proposals.
- Reviewer for refereed journal.

Shadi Hamadeh

**AUB**
- 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 Advisory Committee.
- Member of the FAFS Admissions Committees.
- 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 President on the Senate Pension Plan Working Group.

Participation in Workshops and Conferences

Elie Barbour
• Participated in a seminar sponsored by Cobb Company entitled: Enhancing Efficiency and Profitability in Broiler Production, Intercontinental Hotel, Faraya, April 6, 2011.
• Attended and presented a paper at the American Society for Microbiology Annual Meeting in New Orleans, May 20–24, 2011.
• Attended and presented two papers at the second KASCRSL Research Conference, AUB Hostler Center, May 14, 2011.
• Attended and presented a poster at the CIOSTA Conference. Vienna, Austria. June 29–July 3, 2011.

Mohammad Farran
• Invited to give a lecture on Substitutes to Illicit Crops, Annual Conference for Arab Association on Addiction. Beirut, Lebanon. May 7, 2011.
• Organized, as a VP for the WPSA–Lebanon Branch, a joint scientific conference with the AVSC department and presented two lectures.

Fawwak Sleiman
• Attended and presented a poster in the annual meeting of the American Dairy Science Association, Louisiana, USA. July 10–14, 2011.

Shadi Hamadeh

Strategic Challenges

• The AVSC Department is still facing the challenge of securing the needed infrastructure for the new BS in Veterinary Sciences in terms of laboratories, special equipment, treatment and surgical rooms, live animal specimens, and most importantly the need to renovate a poultry barn at AREC to contain the new laboratories and high-end equipment.
• The Department needs to attract more undergraduate students to the new BS program and for that purpose further promotion activities are considered as well as securing scholarships. Strategic partnerships with NGOs should be activated to highlight the role of the Department in serving Animal Welfare through education.
• The Department must attract more graduate students.
• The Department is still working to establish a Zoonoses center as part of its strategic plan.
• The Department is developing a new degree of Doctor in Veterinary Medicine (DVM) with the help of US schools of Veterinary Medicines.
• The Department will attempt to implement the MOU established between the Animal Care facility unit at the Medical School and the AVSC Department for the efficient use of space to contain the already purchased instruments for training Veterinary Sciences students.
Community:
- The Department received around 160 children of different ages from the International College (IC) and showcased plants and different horticultural activities.
- The Department has launched an urban greening project with Palestinian women in Ain el Helwe camp. This project, in collaboration with the Center for Civic Engagement and Community Service (CCECS), encourages planting of edible plants on roofs and balconies.
- The Department also exhibited greenwall prototypes developed by LDEM I students during the Hamra Festival and organized a student performance “Human Sprawl” as well as a public performance “Abandoned Alive” with LDEM students in Hamra, Beirut.

A Learning environment for students
The Department invited two landscape architects: Adriaan Geuze gave a public lecture “West 8” to LDEM faculty and students in March 2011, and Yan Bunge participated in the final year studio teaching April 15–17, 2011.

New Faculty
The Department appointed Landscape Architect and PhD candidate Yaser Abunnasr as visiting Assistant Professor for two years effective September 2010. Landscape Architect and founder of Studio B, Germany, Elke Berger was appointed as a Visiting Lecturer for one year effective September 2010.

Student activities
The Department supported the reactivation of the Landscape Student Society during fall 2010–11. To date, there are 65 members. The Society’s major goal is to introduce landscape design students to the profession. Two main events have taken place so far in collaboration with the other societies in FAFS: the Acquaintance Party in October 2010 and the Christmas Dinner in December 2010.

Faculty on Leave
Dr. Nadim Farajalla was on paid research leave October 2010–February 15, 2011. Dr. Jala Makhzoumi was on unpaid leave October 2010–September 2011. Dr. Rami Zurayk was on paid research leave October 2010–September 2011.

Consultancies
The Department recruited a consultant, Dr. Maya Zeidan, to work on the accreditation of the undergraduate program and on a new MS. program in Landscape Architecture (October 2010–February 2011). Another consultant, Robert Allam (Bachelor of Landscape Architecture), was recruited to prepare the departmental material for the Beirut Garden
Show in May 2011. Graphic designer, Zeina Moedad, was recruited to design and follow through on the publication of a booklet for the Beirut Landscape Symposium in October 2010.

Personnel
The LDEM department had eight full time faculty members, 17 part time faculty members (Total FTE’s: 12.33 based on First Semester data) and 10 research assistants out of which eight were appointed on grants. Seven graduate assistants were appointed for the academic year 2010–11. The department has one support staff. The tables below detail the personnel in the Landscape Design and Ecosystem Management department.

Full-time Faculty
<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salma N. Talhouk</td>
<td>Professor and Chairperson</td>
</tr>
<tr>
<td>Yaser Abunnasr</td>
<td>Visiting Assistant Professor</td>
</tr>
<tr>
<td>Elke Berger</td>
<td>Visiting Lecturer</td>
</tr>
<tr>
<td>Monika Fabian</td>
<td>Instructor</td>
</tr>
<tr>
<td>Nadim Farajalla</td>
<td>Associate Professor</td>
</tr>
<tr>
<td>Jala Makhzoumi</td>
<td>Professor</td>
</tr>
<tr>
<td>Julie Weltzien</td>
<td>Lecturer</td>
</tr>
<tr>
<td>Rami Zurayk</td>
<td>Professor; Director of IGESP</td>
</tr>
</tbody>
</table>

Part-time Faculty
<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>George Battikha</td>
<td>Lecturer</td>
</tr>
<tr>
<td>Bachar El-Amine</td>
<td>Lecturer</td>
</tr>
<tr>
<td>Reem Fayyad</td>
<td>Assistant Instructor</td>
</tr>
<tr>
<td>Sara Hage</td>
<td>Lecturer</td>
</tr>
<tr>
<td>Ammar Haidar</td>
<td>Instructor</td>
</tr>
<tr>
<td>Maha Issa</td>
<td>Instructor</td>
</tr>
<tr>
<td>Nahida Khalil</td>
<td>Lecturer</td>
</tr>
<tr>
<td>Arlette Lteif</td>
<td>Lecturer</td>
</tr>
<tr>
<td>Rania Masri</td>
<td>Lecturer</td>
</tr>
<tr>
<td>Fawzi Melhem</td>
<td>Instructor</td>
</tr>
<tr>
<td>Wissam Melhem</td>
<td>Lecturer</td>
</tr>
<tr>
<td>Ramzi Mezher</td>
<td>Lecturer</td>
</tr>
<tr>
<td>Nour Raad</td>
<td>Assistant Instructor</td>
</tr>
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</table>

Research Assistants
<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nadine Modad</td>
<td>Departmental Research Assistant</td>
</tr>
<tr>
<td>Bassam Hamzeh</td>
<td>Part-time Research Assistant (on grant)</td>
</tr>
<tr>
<td>Carol Itani</td>
<td>Part-time Research Assistant (on grant)</td>
</tr>
<tr>
<td>Kassem Jouni</td>
<td>Full-time Research Assistant (on grant)</td>
</tr>
<tr>
<td>Wassim Kays</td>
<td>Full-time Field Expert (on grant; Dr. Salma Talhouk/IBSAR)</td>
</tr>
<tr>
<td>Miriam Mattouk</td>
<td>Full-time Research Assistant (on grant; Dr. Salma Talhouk/IBSAR)</td>
</tr>
<tr>
<td>Rasha Moussawi</td>
<td>Full-time Research Assistant (Dr. Talhouk/ CCECS)</td>
</tr>
<tr>
<td>Dima Ousta</td>
<td>Full-time Research Assistant (on grant; Dr. Salma Talhouk/IBSAR)</td>
</tr>
<tr>
<td>Rasha Talhouk</td>
<td>Part-time Research Assistant</td>
</tr>
<tr>
<td>Lama Yasmin Tawk</td>
<td>Part-time Research Assistant (on grant; Dr. Salma Talhouk/ IBSAR)</td>
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Graduate Assistants
<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
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<tbody>
<tr>
<td>Yara Daou</td>
<td>Ecosystem Management</td>
</tr>
<tr>
<td>Farah El Samarai</td>
<td>Ecosystem Management</td>
</tr>
<tr>
<td>Dima Fay</td>
<td>Ecosystem Management</td>
</tr>
<tr>
<td>Bassam Hamzeh</td>
<td>Ecosystem Management</td>
</tr>
<tr>
<td>Noura Hazim</td>
<td>Ecosystem Management</td>
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<tr>
<td>Carol Itani</td>
<td>Ecosystem Management</td>
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<tr>
<td>Moustapha Itani</td>
<td>Ecosystem Management</td>
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</table>

Support Staff
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<tr>
<th>Name</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elias Abi Samra</td>
<td>Greenhouse Technician</td>
</tr>
</tbody>
</table>
Teaching

Courses Offered
During the academic year 2010–11, the Department offered a total of 26 undergraduate courses and one graduate course. Among the undergraduate courses (9) were design studios and (17) were lecture based courses.

New Courses
During summer term 2010–11, the Department proposed two new courses:

- Interior Landscaping, 3cr. (LDEM 264), to be offered by LDEM as a FAFS elective course effective fall term 2011–12.
- Surveying for Landscape Design, 1 cr. (LDEM 244), to be offered by LDEM as a required course effective fall term 2011–12 replacing AGSC 227 Surveying and Irrigation Principles which was offered during spring term at AREC.

Both these courses were approved by the Academic and Curriculum Committee (ACC) during late summer term 2010–11.

Student Enrollment in Courses

Fall 2010–11

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Enrollment</th>
<th>Instructor(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LDEM 200</td>
<td>4</td>
<td>29</td>
<td>W. Melhem (P)/J. Weltzien</td>
</tr>
<tr>
<td>LDEM 201</td>
<td>3</td>
<td>16</td>
<td>B. El Amine</td>
</tr>
<tr>
<td>LDEM 203</td>
<td>3</td>
<td>21</td>
<td>S. Hamadeh</td>
</tr>
<tr>
<td>LDEM 204</td>
<td>6</td>
<td>20</td>
<td>J. Weltzien(P)/Y. Abunnasr/M. Yazbek</td>
</tr>
<tr>
<td>LDEM 209</td>
<td>4</td>
<td>31</td>
<td>S. Talhouk/M. Fabian (lab)</td>
</tr>
<tr>
<td>LDEM 210</td>
<td>3</td>
<td>29</td>
<td>E. Abou Fakhr/M. Haidar/A. Saad (P)</td>
</tr>
<tr>
<td>LDEM 216</td>
<td>6</td>
<td>27</td>
<td>M. Issa (P)/B. El Amine/R. Fayyad/G. Battikha</td>
</tr>
<tr>
<td>LDEM 217</td>
<td>3</td>
<td>26</td>
<td>A. Lteif/ R. Talhouk (lab)</td>
</tr>
<tr>
<td>LDEM 241</td>
<td>6</td>
<td>21</td>
<td>R. Shibli (P)/S. Talhouk/E. Berger (visiting)/D. Rachid</td>
</tr>
<tr>
<td>LDEM 245</td>
<td>3</td>
<td>23</td>
<td>F. Melhem</td>
</tr>
<tr>
<td>LDEM 290</td>
<td>3</td>
<td>19</td>
<td>G. Battikha</td>
</tr>
<tr>
<td>LDEM 295</td>
<td>1</td>
<td>22</td>
<td>G. Battikha</td>
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</table>

Spring 2010–11

<table>
<thead>
<tr>
<th>Course</th>
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<th>Enrollment</th>
<th>Instructor(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LDEM 202</td>
<td>6</td>
<td>22</td>
<td>M. Issa(P)/ R. Mezher/ N. Raad</td>
</tr>
<tr>
<td>LDEM 211</td>
<td>3</td>
<td>19</td>
<td>S. Talhouk(P)/ M. Fabian (lab)</td>
</tr>
<tr>
<td>LDEM 212</td>
<td>3</td>
<td>24</td>
<td>George Battikha</td>
</tr>
<tr>
<td>LDEM 227</td>
<td>3</td>
<td>24</td>
<td>A. Saad (P)/ E. Abou Fakhr/ M. Haidar/L. Hanna (lab)</td>
</tr>
<tr>
<td>LDEM 228</td>
<td>6</td>
<td>21</td>
<td>J. Weltzien (P)/ Y. Abunnasr/M. Yazbek</td>
</tr>
<tr>
<td>LDEM 242</td>
<td>6</td>
<td>21</td>
<td>Rabih Shibli(P)/ E. Berger/ N. Khalil/D. Rachid</td>
</tr>
<tr>
<td>LDEM 245</td>
<td>3</td>
<td>20</td>
<td>N. Farajalla</td>
</tr>
<tr>
<td>LDEM 246</td>
<td>6</td>
<td>24</td>
<td>B. El Amine (P)/W. Melhem</td>
</tr>
<tr>
<td>LDEM 261</td>
<td>3</td>
<td>16</td>
<td>J. Weltzien</td>
</tr>
<tr>
<td>LDEM 263</td>
<td>3</td>
<td>21</td>
<td>M. Yazbek (P)/ S. Hage</td>
</tr>
<tr>
<td>LDEM 265</td>
<td>3</td>
<td>20</td>
<td>G. Battikha (P)/ L. Tawk</td>
</tr>
<tr>
<td>LDEM 296</td>
<td>1</td>
<td>21</td>
<td>N. Farajalla</td>
</tr>
<tr>
<td>LDEM 630</td>
<td>3</td>
<td>17</td>
<td>R. Masri</td>
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Summer 2009–10

<table>
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<th>Course</th>
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<th>Instructor(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LDEM 250</td>
<td>3</td>
<td>17</td>
<td>W. Melhem (P)/ R. Mezher</td>
</tr>
</tbody>
</table>

Completed Theses
None

Research Funding

Internal Grants
One new faculty member received funds from FAFS seed money as below:

**FAFS**
Local, Regional and International Grants

Two faculty member were successful in attracting national and international grants as below:

- Weltzien, Julie. 4D Dance Design-Design Dance, Reestablishing Physical Arts and Humanities. Connections to the Abandoned Environment. The Mellon Foundation for the Arts and Humanities.

Publications

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

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


Articles in other Journals


Book Article or Chapters

Abstracts and Conference Proceedings (Corresponding/Senior author*)


- **Farajalla, N.S.** Effects of Climate Change on Water Resources in Lebanon (Abstract and presentation). *The Regional Meeting for the Catholic Relief Service.* Cairo, Egypt. February 2011.


Newspaper or Magazine Articles


Others

- Lectured to several civic organizations and local clubs on climate change, the environment and water resources.

Nadim Farajalla

**AUB**

- Faculty Director of the Research and Policy Forum on Climate Change and Environment in the Arab World at the Issam Fares Institute for Public Policy and International Affairs (IFI) American University of Beirut.

- Chairperson of the University’s Student Affairs Committee.

- Member of the Advisory Committee for the University’s Center of Teaching and Learning.

- Member of the FAFS Admissions Committee.

- Member of the FAFS Research Committee.

- Member of the FAFS Student Affairs Committee.

- Liaison Officer between FAFS and the FAFS Alumni Chapter.

Salma Talhouk

**AUB**

- Chairperson, Department of Landscape Design and Ecosystem Management (LDEM).

- Member of FAFS Strategic Plan Committee.

- Member of the Executive Committee of IBSAR (Initiative for Biodiversity Studies in Arid Regions), 2010 – present.

- FAFS Representative Member of the University Learning Outcome Coordination Committee.

- Chair of the Ad Hoc Committee for the Revision of the LDEM Undergraduate Program.

- Chair of the Ad Hoc Committee of the LDEM Program Learning Outcome Assessment.

- Chair of the Ad Hoc Committee for the Development of a Master’s program (MLA) at LDEM.

- Member of the Ad Hoc LDEM Website Committee.

- Member of the Ad Hoc LDEM Website Committee.

Others

- Launch of a National Award for Biodiversity.

- Preparing school extra-curricular nature activity-related guide.
Julie Weltzien

**AUB**
- Member at the AUB Choral Society.
- Student Exchange Program Coordinator with the Workshop/Atelier/Terrain (WAT) of the UNESCO Chair in Landscape and Environmental Design of the University of Montreal (CUPEUM).
- Search Committee for Director of Music at the Fine Arts Department.
- Organized student performance “Human Sprawl”.
- Public Performance in Hamra/Beirut with students from LDEM 261: “Abandoned Alive”.

**Others**
- Design, implementation and coordination of the department’s participation in the Beirut Spring Festival, Garden Show at Beiyut Hyppodrome, May 2011.

Rami Zurayk

**Others**
Invited talks:

**Participation in Workshops and Conferences**

Yaser Abuunasr
- Attended and facilitated a session at the workshop: Beirut Landscape Symposium 2010 organized by LDEM and held at AREC. October 21–22, 2010.
- Attended and facilitated a presentation session during the City Debates 2011 held at the Architecture Department, AUB. May 11–12, 2011.
- Attended and presented a research paper at the Resilient Cities 2011 organized by ICLEI in Bonn, Germany. June 3–5, 2011.
- Attended by invitation (TOPOS Magazine) and participated in a discussion panel title: Freedom, Communication and Open Space at the International Federation of Landscape Architects (IFLA) symposium held in Zurich, Switzerland. June 26–28, 2011.

Jala Makhzoumi
- Coordinated and organized with the Chairperson of the LDEM Department, Dr. Salma Talhouk, the Beirut Landscape Symposium 2010, AREC. October 22–23, 2010.

Salma Talhouk
- Coordinated and organized with Dr. Jala Makhzoumi the Beirut Landscape Symposium 2010, AREC. October 22–23, 2010.

**Consultancies**

Yaser Abuunasr
- Consultant to the Faculty of Agricultural and Food Sciences (FAFS) on facilities renovation. Consulting included: design of video conferencing meeting room, room 305, Wing A; complete re-design of the Dean’s office; redesign of student lounges at AREC; follow-up on the design of the residence building renovation at AREC.
- Landscape Consultant to the joint venture between Prime Design (Beirut) and Ecofys (Germany). Sustainable landscape site guidelines and assessment of the public landscape design for the NWD, Solidere.

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
- Najjar and Najjar Architects (Beirut/Vienna): Heights Wellness, Riyadh, Planting Concept and Layout.
- Design consultant for diverse projects: Green Studios (Beirut).
Strategic Challenges
During this past year, the restructuring of the undergraduate program has been completed. The major challenges facing the department for the coming year are to secure the approval process of the revised undergraduate program; finalize the new graduate Masters of Landscape Architecture (MLA) program, and recruit four new faculty lines.

D. Department of Nutrition and Food Sciences

Prepared by: Dr. Ammar Olabi, Chairperson

Highlights
During the period October 1, 2010–September 30, 2011, the Nutrition and Food Sciences Department witnessed several changes that contributed to its growth and development. Actions were taken by the department as follows:

- The NFSC faculty members reviewed and discussed the PhD proposal prepared by the Faculty of Medicine. They agreed that the department should take part in the program after suggesting some amendments to the proposal to better fit NFSC graduate students particularly in terms of number of credits, prerequisites and courses.
- The NFSC department benefitted from the visit and expertise of Dr. Hotchkiss a URB Scholar and a renowned authority in the fields of food science and packaging. Dr. Hotchkiss gave three lectures and conducted productive meetings with the faculty members.
- Steps were taken to finalize the application for the Accreditation of the Nutrition and Dietetics Program by the American Dietetic Association. In addition the assessment component needed by the accreditation application was completed.
- The status of NFSC 371, Food Engineering was changed from its current graduate catalogue listing as an elective course to a required course for the MS in Food Technology program.
- A new full-time instructor was recruited to teach various Nutrition laboratory sections. The successful candidate was Ms. Dima Halabi who holds an MS and Registered Dietician credentials from McGill University, Canada.
- Dr. Kassaify was promoted to Associate Professor effective October 2011.
- The NFSC department renovated one of the Wing B offices (Room 408) and converted it to a room for NFSC graduate assistants.
- An NFSC departmental webpage was launched to cater to the needs of potential and current students as well as potential research collaborators.

Personnel
The NFSC department has 14 full-time faculty members including four instructors, seven part-time faculty members (Total FTE’s: 13.84 based on first semester data), one research associate and eight research assistants out of which six are appointed on research grants. Fourteen graduate assistants were appointed for the first semester, 21 for the second semester and five for the summer session. The department has four support staff. The tables below detail the personnel in the Nutrition and Food Sciences department.

Full-time Faculty

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nahla Hwalla</td>
<td>Dean, Professor</td>
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<tr>
<td>Ammar Olabi</td>
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<tr>
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<td>Omar Obeid</td>
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<tr>
<td>Mohammad Abiad</td>
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<td>Hala Ghattas</td>
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<td>Zeina Kassaify</td>
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<tr>
<td>Farah Naja</td>
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<tr>
<td>Lara Nasreddine</td>
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<tr>
<td>Diana Tannous (Fall 2010–11)</td>
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<td>Sara Kanaan (Spring 2010–11)</td>
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Part-time Faculty

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<tr>
<td>Jamila Natour</td>
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Research Associate

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<td>Nada Adra</td>
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## Research Assistants
- Sara Farhat (on grant)
- Mira Ghaziri (on grant)
- Monia Hamdan
- Reem Hamzeh (on grant)
- Ghina Kaddour
- Melannie Mattar (on grant)
- Maya Tabet (on grant)
- Zeina Younes (on grant)

## Graduate Assistants
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## Support Staff
- Samson Atamian: Pilot Plant Supervisor
- Tania Ghannam: Secretary
- Samir Touma: Technician
- Arsine Derboghossian: Technician
### Teaching

#### Student Enrollment in Courses

#### Fall 2010–11

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Completed Theses
A total of 11 theses were completed in 2010–11 as below:

- Dunia El-Bistami, Omar Obeid (Advisor). The Effect of Oleic Acid in Combination with Varied Levels of Fish Oil on the Lipid Profile of Healthy Men. October 2010.
- Berna Rahi, Omar Obeid (Advisor). Effect of Oleic Acid in Combination with Varied Levels of Fish Oil on Glycemic Control in Healthy Men. October 2010.

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Research Funding

Internal Grants
Eight members of the department received URB grants and one member received a grant from the Issam Fares Institute for Public Policy and International Affairs as below:

University Research Board (URB)
Seven members of the department received URB grants as below:

- Abiad, Mohammad. The Effect of Different Milling Conditions on Thermal Properties of Crystalline Powders.
- Ghattas, Hala. Adiposity and Iron Status in Lebanese Children and Adolescents.
- Naja, Farah. The Association between Dysfunctional Eating Behaviors and Body Image Perception and Across Different BMI Categories in Lebanese Young Adult Females.
- Nasreddine, Lara. Effect of Meal Glycemic Index on PYY, CCK and Ghrelin Postprandial Responses in Healthy Male Subjects.
- Olabi, Ammar. The Effect of Roux-en-Y Gastric Bypass and Sleeve Gastrectomy Surgery on Taste Acuity and Food Preferences in Morbidly Obese Subjects.
- Toufeili, Imad. Determination of Some Biochemical and Antioxidant Properties of Selected Lebanese Honeys.

Local, Regional and International Grants
Eleven members of the department were successful in attracting national and international grants as below:

- Ghattas, Hala. Food and Health in Rural Lebanon: Options to Improve Dietary Diversity, Food Security, Livelihoods and Ecosystem Management. The Effect of a School Feeding Program in Aarsal on Nutritional Status of Children. IDRC/IBSAR.
- Hwalla, Nahla and Ghattas, Hala. Validation of a Lebanese Food Security Assessment Tool. WHO.
- Naja, Farah Prevalence and Determinants of Complementary and Alternative Medicine Use in Lebanon. A National Study. LNSCR.
- Kassaify, Zeina, Obeid, Omar and Olabi, Ammar. Food and Health in Rural Lebanon: Options to Improve Dietary Diversity, Food Security, Livelihoods and Ecosystem Management. IDRC/IBSAR.
- Hwalla, Nahla and Nasreddine, Lara. Associated Research Unit (ARU) for Under-nutrition and Obesity in Lebanon. LNSCR.
- Hwalla, Nahla. Vegetable Seed Trials at AREC. Unifert.
- Olabi, Ammar. Galaxy Milk Shelf Life Study. MARS GCC.

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

International Refereed Journals (Corresponding/Senior author *)


**Technical Reports and Policy Notes**


**Abstract**

• Naja, F., Nasreddine, L., Salem, M., Itani, L., and Azar, S. Association Between Dietary Pattern and Risk of Type Diabetes Mellitus in Lebanese Adults. 8th IEA/EMR’s Scientific Meeting on Globalization and Public Health in the Eastern Mediterranean Region, Beirut, Lebanon. November 25–27, 2010,


**Chapters in books**


**Reports**


**Services**

**Mohammad Abiad**

**AUB**

• Member of FAFS Library Committee.

• Member of the FAFS Academic and Curriculum Committee.

• Member of the Steering Committee, Center for Food Security and Policy in the Middle East.

• Member of the FAFS Admissions Committee.

• Member of the Unified Admissions Committee.

• Member of the University Student Affairs Committee.
Others

- Member of the National Committee for Agricultural Manufacturing and Food Products, Lebanese Ministry of Agriculture.
- Member of the Lebanese National Standards Institution (LIBNOR), Lebanese Ministry of Industry, Technical Committee on Packaging (NL TC 122).
- Member of the Lebanese National Standards Institution (LIBNOR), Lebanese Ministry of Industry, Technical Committee on Safety of Food Processing Machinery (NL TC 653).
- Member of the Lebanese National Standards Institution (LIBNOR), Lebanese Ministry of Industry, Technical Committee on Food Additives (NL TC 1008).
- Member of the Lebanese National Standards Institution (LIBNOR), Lebanese Ministry of Industry, Technical Committee on Food Labeling (NL TC 1011).
- Member of the Lebanese National Standards Institution (LIBNOR), Lebanese Ministry of Industry, Technical Committee on Paper, Board and Pulp, Glass and Metal Containers (NL TC 3010).

Hala Ghattas

AUB

- Member of the FAFS Graduate Studies Committee.
- Member of the FAFS Research Committee.
- Faculty Advisor to the joint FAFS/IFI Program on Food Security and Policy in the Middle East.
- Member of the Organizing Committee for the Regional Conference on Food Security in the Middle East and North Africa: The Role of Academic and Research Institutions, June 2011.

Others

- Organizer of the Nutrition education booths as part of the University Wellness Committee’s Fit-a-thon, November 2010.
- Organizer of women’s nutrition education sessions for a Bedouin community in the Bekaa, January 2011.
- Coordinated internships for Nutrition students with the Rafik Hariri Foundation and International Medical Corps, May 2011.
- Part of an IOCC/World Vision/LAECID initiative to organize youth-youth activities for the promotion of breastfeeding as part of World Breastfeeding Week in collaboration with the University of Balamand and LAU, August 2011.

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.
- Reviewer of Research Articles:
  - World Health Organization Bulletin
  - Nutrition Research
  - European Journal of Clinical Nutrition
  - Reviewer of research articles in Lebanese Science Bulletin.

Zeina Kassaify

AUB

- Member of the FAFS Admissions Committee.
- Member of the FAFS Academic and Curriculum Committee.
- Member of the FAFS Graduate Studies Committee.
- Member of the Academic Development Committee.
- Member of the University Graduate Studies Board.
- Member of the University Senate.
- Member of the University Student Faculty Committee.
- Departmental Facilitator, Program Learning Outcomes (PLO) Committee for FAFS.
- Member of IBSAR Research Committee.
Others
- Submitted a report on the microbiological analysis of ice-cream samples provided by OSLO ice cream and cakes. February 2011.
- Gave two days training on the microbiological analysis procedures at the Doura Flour Mills (DFM), Doura, Lebanon, April 4 and 6, 2011.
- Reviewer for CNRS.
- Reviewer for the Journal of Science of the Total Environment (STOTEN).
- Reviewer for the WHO Eastern Mediterranean Health Journal.
- Reviewer for the Nutrition and Metabolic Insights.
- Reviewer for University Research Board, American University of Beirut.

Farah Naja
AUB
- Member of the University Wellness Committee.
- Member of the FAFS Graduate Studies Committee.
- Member of the FAFS Library Committee.

Others
- Member of the National Nutrition Colloquium Examining Committee.
- Member of the Lebanese Association for Nutrition and Food Sciences.
- Member of Canadian Society for Nutritional Sciences.

Lara Nasreddine
AUB
- Member of the FAFS Academic and Curriculum Committee.
- Member of the FAFS Graduate Studies Committee.
- Member of the FAFS Research Committee.
- Coordinator of the Nutrition and Dietetics Undergraduate Program, AUB.

Others
- Member of the Review Committee appointed by the Ministry of Higher Education for the evaluation of private universities’ branches across Lebanon.
- Member of the National Health Committee, Higher Council for Childhood (Ministry of Social Affairs).
- Board Member of the National Nutrition Colloquium Examining Committee.
- Member of the National Nutrition Colloquium Examining Committee.
- Preparation of examination questions on various topics in Nutrition and Dietetics.

Omar Obeid
AUB
- Member of the FAFS Advisory Committee.
- Member of the University IRB Committee.
- Member of IBSAR.
- Member of the PhD Task Force Committee (Biomedical Sciences).
- Member of Departmental PLO Committee.

Others
- Full member at the Nutrition Society, UK.
- Member at the Lebanese Association for Nutrition and Food Science (Executive Committee).
- Member of the Advisory Committee for the Arab Center of Nutrition.
- Member of the Governmental Colloquium Committee (Dietetic).
- Member of the editorial board: Arab Journal of Food and Nutrition.
- Member of MENANA (Middle East and North Africa Nutrition Association).
- Member of the Nutrition in Emergencies Training Network (NIETN).
- Member of Evaluation Committee (Ministry of Education).
- Member of the Advisory Committee for the Syrian Diabetic Journal (Diabetic World).

• Examination of students (Oral exams).
• Member of the Lebanese Association for Nutrition and Food Sciences.
• Member of the American Society for Nutrition.
• Member of the Nutrition Society.
• Member of the American Association for the Advancement of Science.

Professional affiliations
- Member of the American Society for Nutrition.
- Member of the Nutrition Society
- Member of the American Association for the Advancement of Science

Reviewers:
- Eastern Mediterranean Health Journal (EMHJ)
- Journal of Biological Sciences
- Journal Ecology of Food and Nutrition
- Journal of Saudi Society for Food and Nutrition
- Journal of Applied Physiology
- Biological Trace Element Research
- Journal of Saudi Society for Food and Nutrition


• Public Health Nutrition
• Food and Function
• Journal of the Saudi Society for Food and Nutrition
• Evaluated several IRB projects.

**Ammar Olabi**

**AUB**

• Chairperson of NFSC Department.
• Member of the FAFS Administrative Committee.
• Member of the FAFS Academic Curriculum Committee.
• FAFS Representative on the Second Tenure Task Force.
• FAFS Representative on the Capital Budget Committee.
• Member of the FAFS Commencement Committee.
• Member of the University Food Services Committee.
• Member of the Food Security and Policy in the Middle East Program.
• Member of IBSAR (Nature Conservation Center for Sustainable Futures).

**Others**

• 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.
• Member of the Committee for milk and milk products at the Ministry of Agriculture.
• Member of the Agro Industry Committee at the Ministry of Agriculture.
• Member of the National Codex Alimentarius Committee.

**Imad Toufeili**

**AUB**

• Member of the FAFS Advisory Committee.
• Member of the FAFS Admissions Committee.
• Member of the FAFS Graduate Studies Committee.
• Member of the FAFS Commencement Committee.
• Member of the University Commencement Committee.
• Coordinator of Graduate Studies.

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**Participation in Workshops and Conferences**

**Mohammad Abiad**

• Attended and presented a paper at ENPI–CBCMED Technical Seminar and Partner Search Forum organized by ENPI CBC Med the Joint Managing Authority and the Liaison Office in Valencia, Spain, May 2011.
• Attended the Save Food Congress organized by Messe Düsseldorf in cooperation with the Food and Agriculture Organization (FAO) of the United Nations, Düsseldorf, Germany. May 2011.
• Attended the Workshop on Food Quality and Safety in the Lebanese Industry organized by the Lebanese Ministry of Agriculture in collaboration with the Order of Engineers and Architects, Beirut, Lebanon. April 2011.
• Attended the Symposium on Consumer Protection and Food Safety held at FAFS in collaboration with the Lebanese Ministry of Economics – Consumer Protection. March 2011.
• Attended and presented a Seminar on Food Safety and Packaging: The Hazards, Recalls, and New Strategies. Organized by the Institute of Packaging Professionals (IoPP) at PACK EXPO International, McCormick Place, Chicago, IL, USA. October 2010.

**Hala Ghattas**

• Attended a training workshop for Institutional Review Board members conducted by the Human Research Protection Program (HRPP) October 25–27 2010.
• Presented a talk at the Regional conference on Food Security in the Middle East and North Africa: The Role of Academic and Research Institutions, June 2011.

**Nahla Hwalla**


• Invited to present a lecture at the MENA Diabetes Leadership Forum. Dubai, December 2010.

• Invited to attend the Board of Commission on Accreditation for Dietetics Education (CADE) and the CADE Workshop. Boston, USA, November 3–6, 2010.

• Invited to attend the WHO Meeting on A Prioritized Research Agenda for Prevention and Control of Non-communicable Diseases, to provide advice to WHO. Geneva, October 20–21, 2010.

**Zeina Kassaify**

• Presented two seminars at the Wellness Program Event, American University of Beirut, Beirut, Lebanon, December 8–9, 2010.

• Presented as a talk at the Arab Beverages Conference ABC 2010, Beirut, Lebanon, October 27–28, 2010.

• Presented at the International Conference on Research Trends in Food Safety and Security at the Lebanese American University, Beirut, Lebanon, May 3–5, 2011.

• Gave three presentations: Salmonella spp in the Meat Chain; Listeria monocytogenes in the Meat Chain; and an overview on the main agricultural and food production of the Mediterranean area with focus on Lebanon at the University of Sassari, Sassari, Italy. February 2, 8 and 9, 2011.

• Presented as a talk in the Symposium on: Consumer Protection and Food Safety at FAFS, March 15, 2011.

• One day course on basic food microbiology to the Lebanese Army safety inspectors. Republican Guards offices, September 5, 2011.

• Supervised five days of training on the microbiological analysis procedures at Tanmia Bekaa, Lebanon, August, 2011.

• Gave a seminar on Water and Waste Water Treatment. Organized by EMCO in Biel, Beirut, Lebanon. June 1, 2011.


**Farah Naja**


• Attended and presented a lecture at the Scientific Conference on Basics of Balanced and Sensible Nutrition, Organized by OLDWAYS, LANFS and FAFS on April 21, 2011.

**Lara Nasreddine**

• Attended the CADE Accreditation workshop, Commission on Accreditation for Dietetics Education (CADE), Boston, USA. November 5–6, 2010.


• Attended and presented a lecture at the Scientific Conference on Basics of Balanced and Sensible Nutrition, Organized by OLDWAYS, LANFS and FAFS/ AUB, Beirut, Lebanon. April 21, 2011.

• Guest speaker on Obesity/Diet/Nutrition for the Graduate course entitled Epidemiology of Communicable and Non-Communicable Diseases offered at the Faculty of Health Sciences. March 18, 2011.

• Essentials of Research Study Design and Analysis Seminar Series (Clinical Research Institute, in collaboration with the Faculty of Health Sciences).

• Attended the Research Made Easy: Design and Statistics Symposium, Clinical Research Institute, held at the Faculty of Medicine, March 26, 2011.

• Attended and presented a lecture at the Scientific Conference on Basics of Balanced and Sensible Nutrition, Organized by OLDWAYS, LANFS and FAFS/ AUB, Beirut, Lebanon. April 21, 2011.

• Presented as a talk in the Symposium on: Consumer Protection and Food Safety at FAFS, March 15, 2011.

• One day course on basic food microbiology to the Lebanese Army safety inspectors. Republican Guards offices, September 5, 2011.

• Invited to attend the Board of Commission on Accreditation for Dietetics Education (CADE) and the CADE Workshop. Boston, USA, November 3–6, 2010.

• Invited to attend the WHO Meeting on A Prioritized Research Agenda for Prevention and Control of Non-communicable Diseases, to provide advice to WHO. Geneva, October 20–21, 2010.


Consultancies

Mohammad Abiad

- Consulting on US Food and Drug Administration (FDA) compliance for low-acid and acidified canned food. Develop heat penetration profiles and required processing conditions for several products. Sonaco Sarl, Byblos, Lebanon 2011.
- Three-day workshop and capacity building in implementation of laboratory procedures to understand the effect of different ingredients and processing conditions and parameters on the quality of jams, jellies, marmalades, dairy production, bread making, blanched vegetables and emulsion stabilization for the Lebanese European Agro-Food VTE project, Kab Elias, Lebanon 2011.
- Consulting on capacity building in design and implementation of experimental procedures. The main objectives were to design, develop and implement agro-food laboratory scale production procedures to facilitate the understanding of the various roles of key ingredients/parameters in food processing for the Lebanese European Agro-Food Vocational Training and Employment Project. Kab-Elias, Beqaa, Lebanon 2011.
- Consulting on various projects regarding proper packaging material selection and package design. The Lebanese Packaging Center (Liban Pack) Beirut, Lebanon 2010–11.
- Developed guidelines rules and procedures for the Beverage Innovations and Development Competition for the nonalcoholic beverages industry in the other Arab countries (Qatrah Annual Competition) and served on the judging panel. Qatrah Beverage Innovations and Development Competition. Arab Beverage Association, Beirut, Lebanon 2010–11.

Zeina Kassaify

- Gave two days training on the microbiological analysis procedures at the Doura Flour Mills (DFM), Doura, Lebanon, April 4 and 6, 2011.
- Prepared a report after the microbiological analysis of several potato starch samples from BACH sal. December 2010.
- Finalizing the In-House Food Safety Standards for the Lebanese Army December 2010.
Lara Nasreddine

- Infant and Maternal Nutrition in Rural Lebanon, August 2011, Issam Fares Institute and IFAD.

Omar Obeid

- Invited by the Center for International Health and Development (CIHD) University College London to evaluate the running of the Nutrition in Emergency training courses and to discuss the collaboration between CIHD and AUB in order to continue running the Nutrition in Emergency training course at AUB September 24–26, 2011.

Ammar Olabi

- Interview about canned foods for the Lebanese Broadcasting Corporation (LBC) Night News June 10, 2011.

Certificates


Media Appearances

Zeina Kassaify

- An Interview about the safety consumer rights on the program “Akhbar l Saba7” Future TV, March 17, 2011.
- An article about the food safety situation in Lebanon in the “AL Rawabet” September 2011, issue 121, pages 28 and 29.
- An interview about the safety of vegetables on the program “ALIVE” MTV, September 10, 2011.
- Two episodes about Food safety in Lebanon on the program “Kalam l Ness” LBCI. July 14 and July 21, 2011.
- An Interview about the safety consumer rights on the program “Akhbar l Saba7” Future TV, March 17, 2011.

Lara Nasreddine


- Interview with Al-Fajr radio station: Pesticide Residues in the Lebanese Diet December 30, 2010.
- Interview with the Al-Safir newspaper: Obesity and its Dietary Determinants, April 22, 2011.

Ammar Olabi

- Interview about canned foods for the Lebanese Broadcasting Corporation (LBC) Night News June 10, 2011.

Strategic Challenges

Students Internships for Food Science and Management Undergraduate Students

The department has taken action to hire a consultant to streamline the process of placement and follow up of the FSMT Junior summer Internship.
Outreach
The 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.

Program review
The department will be conducting the process of academic review for the Food Science and Management Program and the Food Technology and Nutrition Graduate Programs over the 2011–12 academic year.
American University of Beirut
Faculty of Agricultural and Food Sciences

Tel: +961-1-343002
Fax: +961-1-744460
Website: www.aub.edu.lb/fafs
Email: fafs@aub.edu.lb