LAUMNI BULLETIN



LAU Adnan Kassar School of Business joins the

TOP 5%

of the business schools worldwide accredited by AACSB International







Every Drop Counts

FEATURES

6 Apocalyptic predictions



Sea levels have risen between four and eight inches in the past 100 years due to global warming. Current projections suggest that sea levels could continue to rise between four inches and 36 inches over the next 100 years. A 36-inch increase would swamp every city on the East Coast of the United States, from Miami to Boston. *Irina du Quenoy* takes a look at how probable this is and whether it is a threat to Lebanon.

16 Narratives of a coastline

More and more of the world's people live in coastal regions and many major cities are on or near harbors with port facilities. People view a coast and all it has to offer in various ways, as a frontier to be defended or a tourist attraction central to the country's economy. *Reem Maghribi* reached out to members of the LAU community to share anecdotes born out of Lebanon's particular stretch of Mediterranean coastline.



Water wars: Are they really the future?



Human settlements have always depended on water supply. Today, the most essential human resource is in severe crisis and is the cause of major conflicts in the Middle East and other regions. *Federica Marsi* discovers how the direct correlation between environmental changes, world population growth and water shortage threatens the MENA region still, turning water into a matter over which more wars will be fought.

36 No time to "waste"

Dealing with garbage requires a more comprehensive solution than just collecting and treating it. Garbage is one of the biggest problems, not only in Lebanon, but also around the world, as the global population is increasing so rapidly. The majority of countries are facing this problem and thus need to put in place a long term political solution to deal with it. *Gaja Pellegrini-Bettoli* takes a look at possible solutions to offset health and environmental risks in Lebanon.



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Front cover by: We would like to extend our thanks to Gökhan Numanoglu, assistant professor of graphic design at LAU's School of Architecture and Design and the students of his "Art of Illustration" class for taking part in designing the cover for this issue. The decision to choose one of the 28 proposed covers was a difficult one, but in the end we would like to congratulate Jamie Melki for getting across the message that every drop of water is precious in an attractive and distinct manner.

Back cover by Charbel Fersan (B.E. '12)

From the President's Desk

Dear Friends.

We are at a critical juncture in our planet's history. Modernization has come at a high cost, and in some cases the damage caused is irreparable. As industrialization accelerates, we bear witness to a wave of climate change disasters that most scientists regard as only a harbinger of things to come. For example, human settlements have always depended on a reliable supply of water. Today, this most essential resource is in severe crisis and its shortage could threaten the Middle East, giving the region yet one more cause for violent conflict.

Violence is not the only danger. For example, unmanaged garbage threatens Lebanon's water supply. But if pollution, emissions, and habitat destruction are at an all-time high, so is environmental consciousness. Scientists and engineers at LAU are at the leading edge of research on environmental problems and their solutions.

Understanding how surface ocean currents interact and affect our planet is just one area of research being carried out at LAU. Its findings will provide new information to help predict the movements of pollutants dumped from Lebanese coastal cities and mitigate their effects.

The sand, rocks, and inshore waters along Lebanon's long, diverse, and densely populated coastline have yet to be thoroughly studied. LAU, with its international faculty and student body and close ties to centers of research worldwide, its campuses located in the port cities of Beirut and Byblos, is well-positioned to lead efforts to understand our maritime environment.

Understanding the forces that brought our planet to its current precarious state is the first step. We, at universities, are guardians of the values of the society that sustains us, and no civic responsibility is greater than that of protecting our precious resources. Our students are the resources of the future. With our supporters, we strive to present them with valuable internship, academic, and career opportunities, both at LAU and abroad.

As LAU continues to evolve, we must not forget that the present and future health and well-being of our students is a direct reflection of our university. Recognition and awards are highly effective at motivating people to work harder and aim higher. Hundreds of students were acknowledged publicly at the recent annual commencement, honor society, and club awards ceremonies, recognizing their academic excellence, leadership, dedication to others, and community spirit.

Join us in our journey of discovery as we trace the role water plays in climate change and its effect on our future. The reality of human-induced climate change, though well documented, has only recently found its way into high-level political and public discourse at the international level. Environmental awareness increasingly shapes fundamental research questions in a variety of academic fields. We have a fundamental role to play — intellectually, culturally, economically, and ethically — in the process.

Joseph G. JabbraPresident





Changing a hospital culture

By Irina du Quenoy

LAU promotes teamwork to improve patient results and safety "Hospital errors are the third leading cause of death in the U.S.," says
Brent R. Foreman, assistant executive director of nursing quality and patient safety at Hamad Medical Corporation in Doha, Qatar. As a solution, the U.S. National Academy of Medicine recommends enhanced collaboration between healthcare professionals — known technically as Interprofessional Collaboration, or IPC — promoting team work in order to improve patient outcomes and satisfaction.

Speaking to an audience of approximately 150 doctors, nurses, pharmacists and other members of the health sector assembled for a conference sponsored by LAU's Interprofessional Education (IPE) program this past April, Foreman delved into the difficulties hospitals face as they attempt to introduce IPC into their culture. He identified "hierarchical and parental leadership styles," in which physicians assume primary leadership roles while the rest of the hospital team members play backup, as a central problem. "True collaboration will not occur," he pointed out, until this physician-centered model is replaced with "well-formed individual agency," that is, the opportunity for nurses, pharmacists, nutritionists and other relevant hospital staff to weigh in on the best course of treatment for particular patients.

leadership" from institution administrators is critical in making sure IPC practices take root. In addition, hospitals implementing these practices should undertake efforts to make sure that their staff clearly understands the benefits of this approach over the "old way of doing things."

Nancy Hoffart — outgoing dean of LAU's Alice Ramez Chagoury School of Nursing and the inspiration behind the university's IPE program — also emphasized the importance of leadership. "We need key leaders in the hospitals," she said. In her view, the introduction of systematic IPC across hospitals means that "policies and procedures need to be different, the rewards structure needs to be different."

"Some Lebanese hospitals are engaging in interprofessional collaboration without knowing or labeling it."

—Nadine Zeeni Aour, coordinator of LAU's IPE program

Dr. Nadine Yared Sakr of the Lebanese University's medical school developed the discussion further by taking into consideration the specific challenges faced by the country's hospitals. For example, "in Lebanon, third party payers don't really appreciate or value collaborative work," she said. "It doesn't exist as a category worthy of financial reimbursement. So, if you as physician or nurse or radiologist spend time in collaborative rounds, you don't get paid for it."

Still, Sakr noted that despite the lack of a financial incentive, Lebanese hospitals do in fact see a lot of collaborative teamwork. "It is true that we don't have institutionalized IPC, but we do have customized initiatives," she specified, highlighting among other successes the recent introduction of pharmacists on hospital floors across the country.

Nadine Zeeni Aour, coordinator of the IPE program at LAU, also agrees that the picture in Lebanon is better than it may appear at first glance. "Some Lebanese hospitals are actually engaging in interprofessional collaboration, frequently without knowing that they are actually doing it or without labeling it," she explained.



Following Foreman's presentation, Dia Hassan, president and CEO of Bellevue Medical Center in Mansourieh, proposed several concrete ways in which hospitals could move away from the physician-centered model. In her view, "committed"

Bidding farewell to ARCSON's caretaker

By Federica Marsi



Nancy Hoffart's legacy will inspire the nursing community for years to come

"She broke the stigma attached to the nursing profession."

—Alumnus Chant Kazandjian



In its seven years of life, the Alice Ramez Chagoury School of Nursing (ARCSON) has become a leading institution in Lebanon and in the Middle East through the attentive care of Nancy Hoffart, who joined LAU as founding dean when the school was born in 2009.

The vision behind its creation was that of an institution committed to reversing the critical shortage of professional nurses in Lebanon. By offering a well-rounded degree that would encompass high standards of nursing education, including an innovative educational model and effective teaching strategies, Hoffart aimed to make ARCSON the cradle of a new generation of patient-centered nurses with a strong grasp of the principles of interdisciplinary care.

Since 2010, ARCSON has enrolled over 180 students, established its identity as a school, and positively affected the quality of nursing and health care in Lebanon. Alumnus Chant Kazandjian remembers how Hoffart's contagious enthusiasm led him to embark on his journey at LAU. "I remember meeting her for the first time during my application to ARCSON and she promised that our educational experience would be second to none," he says. "It was that feeling of excitement that encouraged me to jump on board."

The preparation received at LAU earned Kazandjian acceptance into a master's program in clinical mental health counseling at the University of Nevada in Las Vegas, through a prestigious Fulbright scholarship. "I cannot even begin to express how much I have learned from her," he says. "She urged us to be leaders and to excel in all that we do. I am a nursing leader today due to her efforts."

With almost 30 years of experience in nursing education, over 50 publications, and numerous awards, Hoffart is about to transition from LAU to become the Forsyth Medical Center Distinguished Professor at University of North Carolina-Greensboro. "I'm looking forward to a new challenge

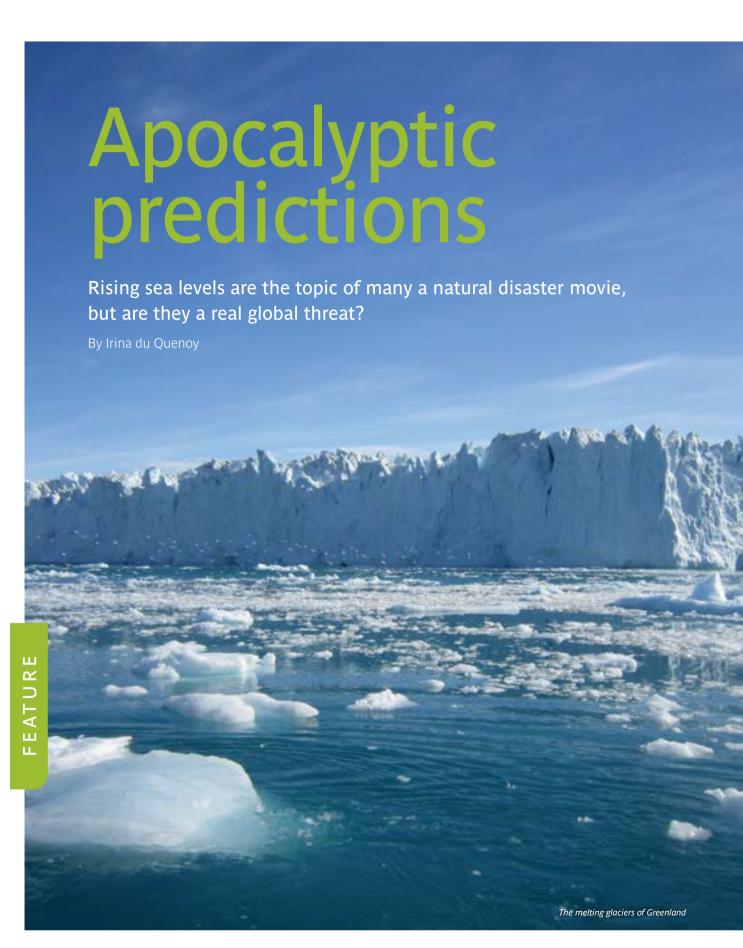
and a new learning curve," she says. According to Hoffart, her new position is a natural step in her journey toward the promotion of the Interprofessional Education (IPE) program, which she introduced at LAU. "I always felt that if we worked together as a community — faculty, staff and students — we would be more likely to succeed," says Hoffart.

According to Assistant Dean Myrna Doumit, Hoffart has put her teachings into practice by involving students in the school's decision-making process, giving them the chance to actively shape their teaching institution. "She empowered students by adopting an open door policy, by being there for them and with them during all activities," says Doumit. "They have found in her the support they needed."

Among her many accomplishments, Hoffart unleashed the unrealized potential of the nursing profession in Lebanon and in the region. By drafting a well-rounded curriculum and granting students cooperative education internships in reallife settings, she made it possible for the students to take licensing examinations to become registered nurses abroad.

This translated into a rise in applications for the nursing degree, including male professionals. As LAU alumnus Kazandjian puts it, Hoffart contributed to "breaking the stigma attached to the nursing profession in a country that often regards nurses as being subordinate to other health providers."

The greatest reward for years of hard work is, according to Hoffart, seeing her nursing students being praised by those who have benefitted from their care. "Every patient they will care for throughout their career deserves the best care they can possibly give," she says. "I hope that my time here has moved us a least a tiny step forward in ensuring that nursing is positioned as a full partner in the health care system in order to guarantee safe, high quality care for those in need."





A lonely scientist sits in a hut in the Antarctic, observing the rate at which icebergs are melting into the freezing cold ocean. Suddenly he jumps up and frantically Skypes the head scientist at the North American Aerospace Defense Command (NORAD). "It's a catastrophe, a disaster of untold proportions!" he screams into the microphone. "Sea levels are rising so quickly that everything, New York, Boston, Paris will be flooded! We have ten days before the end of the world!!!"

This is a scene familiar from Hollywood apocalyptic disaster movies, and it rarely ever ends well. Giant waves crash over the Golden Gate Bridge in San Francisco, snapping it in two like a twig. Venice, of course, disappears in a matter of seconds. Chicago vanishes under the waters of Lake Michigan. When it's all over, there are only a few thousand people left alive on the planet, mainly those lucky enough to run high up into the mountains when the water came rushing at them.

Rising sea levels — whether due to climate change or other factors — have entered the popular imagination to be sure, but until recently the imagination is where they stayed. Recently, however, the empirical facts on the ground have begun

to disturbingly predict the Hollywood scenarios, albeit developing at a slower rate

In March 2016, Venice saw record high flooding, in which the seasonal *aqua alta*—in itself a normal and regular occurrence—covered the city in a meter and a half of standing water. Around the same time, the tiny island nation of the Maldives desperately looked for help at the Paris Climate Change Conference, as its shores disappear under the advance of the Pacific Ocean. More strikingly still—at least in terms of its capacity to unnerve the average American—an article in the *New Yorker* magazine predicted in December 2015 that Miami would be uninhabitable within fifty years, as the Atlantic Ocean overwhelms its sea defenses.

Any way one looks at it, the new scientific projections are startling. In 2013, the United Nation's Intergovernmental Panel on Climate Change — which serves as an internationally accepted authority on climate change — produced a report stating that "it is virtually certain that sea level will continue to rise during the 21st century and beyond," with an expectation of at least a three-foot (equivalent of 0.91m) rise by the end of the present

"It is virtually certain that sea level will continue to rise during the 21st century and beyond."

—United Nation's Intergovernmental Panel on Climate Change

century. The United States Army Corps of Engineers is projecting an increase of up to five feet (1.5m). This, however, is not as daunting as the figure arrived at by the U.S. National Oceanic and Atmospheric Administration (NOAA): of up to six and a half feet (1.98m). The culprit? Greenhouse gas emissions that are heating up the Earth's atmosphere. In short: global

There are two direct consequences of climate change for rising sea levels. On the one hand, water from melting ice is adding to the problem. In addition, according to Ahmad Houri, associate professor of chemistry at LAU, "thermal expansion of sea water, resulting from rising temperatures, is also a major contributor"

And that's not all. The above projections are all built around models that do not account for the possible collapse of the Antarctic and Greenland ice sheets. Just in time for the writing of this article, new research published in the journal *Nature* in March 2016 claims that if high levels of greenhouse gas emissions continue unabated, the oceanfront glaciers of the Antarctic continent will likely melt, leading to a global sea level rise of about six feet (1.82m) by 2100, equaling the worst-case scenario projections of NOAA.

According to Ben Strauss, director of the program on sea level rise at Climate Central (an independent organization of scientists based in New Jersey), this is really bad news for the twenty-second century. Strauss recently told the Washington Post that, while communities living in coastal areas will see serious problems in the coming decades, "under the high emissions scenario, the 22nd century would be the century of hell." In his view, these unthinkable rising sea levels would "erase many major cities and some nations from the map."

In this doomsday scenario, Miami

Beach and the Florida Keys would begin to vanish by 2100. Eventually, all of South Florida would be swamped, sharing the fate of coastal cities all over the globe, from Washington, D.C. to Shanghai. Looking down the road a few centuries, the remaining land on the planet might be a chain of islands made up of the tops of mountains that once crowned seven continents.

The scientific consensus is clear that there have been periods, historically, when the sea level was significantly higher than it is now. But they are also clear that today we are witnessing the oceans rising at a rate higher than anything seen over the past 3,000 years. A study made public by the U.S. National Academy of Sciences (NAS) in February demonstrated that globally, seas rose about 14 centimeters over the 20th century, at a rate of 1.4 millimeters a vear. Fast forward sixteen years into the new millennium, and the rate is now 3.4 millimeters annually, which suggests that the process is still accelerating.

Furthermore, and damningly, the scientific community is united in maintaining that man-made climate

change is the main contributor to what may end up looking like the repetition of the biblical Flood familiar from the story of Noah. In other words, even if what is happening is in part a cyclical natural phenomenon (which is the argument

"The phenomenon is a serious problem for countries like the Maldives and areas like the Nile Delta, whereas Lebanon is not considered a major concern."

—Ahmad Houri, LAU associate professor of chemistry

most often made by the camp that denies that climate change is anything to worry about), it is being made much, much worse by the high emission of greenhouse gases by industrialized nations.

The good news is that precisely because the rising waters are a largely





man-made problem, humanity is in a position to mitigate, if not completely reverse, the process. The apparently simple answer is that we should emit less carbon dioxide. The study published by the NAS suggests that, in a low emissions scenario, the seas might rise only as much as 61 centimeters by 2100, instead of the apocalyptically frightening six feet. Whether or not cities like New York can be saved, then, all depends on the extent to which nations are able to carry out the commitments they made at the recent Paris Climate Accords to lower emissions across the board.

On another half-way optimistic note, it does appear that the effects of rising sea levels are, and will remain, uneven, and that some localities are more likely to suffer negative consequences than others. For example, even though the entire west side of Lebanon is a continuous coastline facing the Mediterranean, scientific consensus at the moment is that of all the problems associated with climate change, rising waters are not an issue for this country. According to Houri, "at

the scale that is being considered today, they are a major concern for countries that lack altitude above sea level and are rather flat." In his view, this means that the phenomenon is a serious problem for countries like the Maldives and areas like

"Unthinkable rising sea levels would erase many major cities and some nations from the map."

> —Ben Strauss, director of the program on sea level rise at Climate Central

the Nile Delta, whereas for Lebanon, "it is not considered a major concern."

Samira Korfali, associate professor of chemistry at LAU, agrees that Beirut, unlike New York or Miami, is in no danger from being overwhelmed by flooding seas caused by global warming any time soon. Beirut, she says, does have a problem

with seawater increasingly infiltrating the drinking water system, but this has to do with the "excessive exploitation of ground water through private wells," not with rising sea levels as a whole.

Both Korfali and Houri consider that the major problem for Lebanon related to climate change is a reduced annual rainfall. "For our country, this would have disastrous effects," says Houri, "and would force us to join many other water-poor countries that resort to the expensive process of water desalination."

In any event, it seems, climate change is forcing us to begin adapting to a new global reality, even if the effects of one particular part of the puzzle – rising sea levels – will remain unevenly distributed. The Intergovernmental Panel on Climate Change report for 2013 puts it in no uncertain terms: "Sea levels will continue to rise for centuries, even if [greenhouse gas] concentrations are stabilized, with the amount of rise dependent on future [greenhouse gas] emissions." It is up to us, as a species, to adapt to this reality.



LAU gains AACSB International accreditation

By Federica Marsi

Programs offered at LAU have been certified according to international excellence standards

"We are serious about the business of business education."

—Said Ladki, interim dean of LAU's AKSOB

The Adnan Kassar School of Business (AKSOB) has been awarded Association to Advance Collegiate Schools of Business (AACSB) accreditation, the hallmark of excellence in business education earned by less than five percent of the world's business programs.

The association has rigorous standards for evaluating educational quality, all of which were met by LAU during the latest AACSB Peer Review Team visit that took place in mid-March.

"This accreditation is another significant testimony to our unshakeable commitment to raise LAU to its well dignified and merited place in the constellation of leading institutions of higher education the world over," says LAU President Joseph G. Jabbra.

Founded in 1916, AACSB International is the longest-serving global accrediting body for business schools that offer undergraduate, master's and doctoral degrees in business and accounting.

Robert D. Reid, executive vice president and chief accreditation officer of AACSB International, praised LAU for demonstrating "success within each of the three pillars on which AACSB accreditation rests — engagement, innovation and impact."

Only 764 business schools in 52 countries and territories maintain AACSB accreditation. The process, which includes self-evaluation and peer-review elements,

has engaged LAU in six years of growth and improvement in order to meet the standards.

"We worked hard on self-evaluation, learning how to always analyze whether what we are implementing is improving our standards," says Samar Aad Makhoul, of AKSOB's Accreditation and Continuous Improvement office.

Students also joined the academic staff to reach this goal. Business student Rabih Takkoush worked extra hours to help out assessing the compliance with the accreditation criteria, eager to see his institution accredited before he graduates next year. "I am sure that, coming from an AACSB accredited school, my C.V. will be placed on top of everyone else's," he says.

While the accreditation marks the achievement of a goal, it is by no means the end of the journey, explains LAU Provost George K. Najjar. AACSB International must be extended on a five-year cycle, obliging each institution to maintain its achieved standards.

This new landmark is a further step in the journey that began with LAU's accreditation in 2009 by the New England Association of Schools and Colleges (NEASC), in which the Adnan Kassar School of Business also took part.

"We are serious about the business of business education," says Said Ladki, imterim dean of AKSOB. "We not only think big but also make it possible."

Skimming the surface

Understanding how surface ocean currents interact and affect our planet Leila Issa, LAU assistant professor of applied mathematics, is currently working with Julien Brajard from LOCEAN laboratory at Pierre and Marie Curie University (Paris VI) on modeling surface currents in the eastern Mediterranean.

What are surface ocean currents?

We use the term "surface ocean currents" to describe the continuous movement of water from one location to another on the surface of the ocean. Their speed and direction are affected by forces acting on water. In the open ocean the forces are the earth's rotation and the wind. Along the coast, in addition to the wind, they can be influenced by waves, upwelling, sea bottom interaction and other complex factors.

released in the sea or near the coasts.

If we understand surface currents, we will be able to answer questions such as: if oil spills in the open east Mediterranean, where does it go? How long does it take to biodegrade? These questions are essential if one is to assess the impact on ecosystem and marine life. Similar questions can be answered regarding solid waste.

How big and how fast are they, and how can they be measured?

The large scale motion (meso-scale) of the Mediterranean's currents is characterized by length scales on the order of tens of kilometers. This motion is much better understood than its small scale local counterpart, which can occur near the coasts for example, on a monthly, weekly or even daily basis.

Altimetry, a method that consists of using satellite measurements of sea surface height and converting it to velocity, has been widely used to predict the mesoscale features of the ocean. It is inaccurate, however, in resolving short temporal and spatial scales.

To improve overall velocity estimation, in-situ observations provided by surface drifters can be used. Drifters follow the currents and, when numerous, they allow for an extensive spatial coverage of the region of interest. The challenge is that insitu data is relatively scarce near Lebanon.

Combining several types of data such as altimetry, drifter positions and wind speed, we came up with an efficient computer algorithm based on a mathematical model of these currents, to efficiently and accurately estimate these currents at various scales near the Lebanese coast.

How will the results be used?

Our method is accurate and efficient, making it well suited for near real time applications. This is very important in events where a fast response is needed, such as search and rescue or predicting the fate of oil spills. Our findings will also provide new information to help predict the movements of pollutants dumped from Lebanese coastal cities.





"Our findings will help predict the movements of pollutants dumped from Lebanese coastal cities."

—Leila Issa, LAU assistant professor of applied mathematics

Why study them? What can they tell us?

Currents are the major factor in transporting and dispersing energy, nutrients, and pollutants in the marine environment. In Lebanon, marine pollution is a particularly serious problem, given the amount of solid waste that has been and is being dumped into the sea. Also, Lebanon is always at risk from oil spill catastrophes. Additional potential risks could arise from the increasing activity of oil and gas exploration in the eastern Mediterranean.

The accidental release of contaminants into the ocean, either near highly populated coasts or in the open sea, poses major threats to water and food supplies. Not only does it have an immediate and local effect, but the resulting damage also extends over large distances and longer times as ocean currents transport the contaminants. An accurate estimation of surface currents is key to understanding pollutant transport mechanisms, specifically the fate of floating objects



Master chef in all but name

By Federica Marsi

Hospitality students turn LAU into a five-star restaurant

It was not yet midday on a Sunday when students gathered in the kitchen facility of LAU's Adnan Kassar School of Business. On this second consecutive day of preparation, the atmosphere was bustling with the excitement and nervous energy typical of big events.

Within a few hours, the adjacent salon hosted over 60 guests, including the commission assessing the business school's compliance to the Association to Advance Collegiate Schools of Business (AACBS) accreditation criteria. They were to be treated to a four-course restaurant quality prepared by 25 hospitality and tourism management students, who themselves would gain hands-on experience of a real service.

"The students have been in charge of preparing the event from A to Z," says their instructor Bassem Slim, "because practical training is as important as the theory itself."

The students sifted through different menu options for a week, before coming up with the best formula to present their guests with. "It was a very formative experience," says hospitality student Sarah Halabi, who dreams of one day opening a chain of gourmet restaurants. "It taught us how to work under pressure and support each other as a team."

According to Halabi, the students welcomed the task with enthusiasm and determination. "We wanted to show what LAU has to offer," she says.







Acting concertedly as a well-directed orchestra under the supervision of their instructor, the students dedicated hours of hard work to the preparation of a magnificent-looking crab salad with avocado and an elegantly presented steak with mushroom sauce, among other dishes. Every piece of the puzzle, from flatware to flowers, lighting to linens, and tables to tunes, was curated to the smallest detail to complement the food.

At 7 p.m. sharp, the sound of incessant chatter that had wafted through the kitchen door throughout the day ceased suddenly as the students in charge of the service dispersed around the well-groomed salon to welcome their guests.

The hard work was repaid with a

resounding success, according to guest and alumnus Hassan Chaker (B.S. '96, M.B.A. '05), managing director of MCA People Solutions. "The dinner was outstanding, from the welcoming to the presentation and the food itself," he enthused. "It was like being in a five-star hotel restaurant."

Junior year student Karim Balhawan, whose family works in hospitality, believes that customer satisfaction can be achieved only when all the details are handled with the same care. Together with Halabi, he has tried most restaurants in Beirut, analyzing what works and what does not. "The service is as important as the food," he says, naming different places he would not go back to despite the tasty

"Practical training is as important as the theory itself."

—Bassem Slim, LAU hospitality instructor

meals. He dreams of one day using the experience gained in his family business to start his own place.

"When people choose to have a night out they don't just want to eat, they want comfort and relaxation," says Balhawan. "This is what we are learning, to give our customers the full experience."

Investing time and expertise

By Naseem Ferdowsi

LAU's supporters are increasingly giving back to students through valuable internship and career opportunities



"LAU students are hard workers, motivated and dedicated."

—Zeina Nasser, head of administration at Consolidated Contractors Company



"Students constitute the real wealth of our country," says Neemat G. Frem, the president and CEO of INDEVCO Group.

Frem's company is one of many enterprises contributing more than just monetary support to LAU. From trainee programs to positions for fresh graduates, several of the university's donors are extending valuable opportunities to its students.

In fact, INDEVCO Group's summer internship program accepts approximately 100 students per year, of which 10 percent come from LAU. "Our internship program, which is held in Lebanon, Saudi Arabia and Egypt, aims to apply students' education to a practical career-related job, offer useful training, boost students' employability, and source potential candidates for future openings after graduation," says Fadi Younes, the group's recruitment manager.

The firm seems to be reaching its aim. It employed eight LAU graduates in 2015 and four in the first quarter of 2016, with many having interned there prior to their employment.

"LAU students and those who come from other universities are an investment for us as they are our future leaders," says Zeina Nasser, head of administration at Consolidated Contractors Company (CCC), another of LAU's donors.

CCC offers a trainee program to students, which provides real-life work experience at project locations in Saudi Arabia, Oman, Kuwait, the UAE, Qatar and Kazakhstan. And despite the competitive nature of the program, seven to ten LAU students are accepted each year.

"LAU students are hard workers, motivated and dedicated, and they meet the criteria that we are looking for," explains Nasser.

Joe Karam, an LAU graduate with a B.E. in civil engineering who took part in the trainee program, says, "Training with CCC gave me a very clear picture of the world

of construction. This helped filter my options when making my career choice after I graduated, as I knew what a site engineer's career looked like." Karam is now employed at CCC as a site engineer in Saudi Arabia.

Guilaine Ghossoub, an LAU graduate and current Dar Al-Handasah environmental and infrastructure engineer, feels similarly about her firm's internship program providing students with a glimpse of their potential career. "Our internship allows students to contribute to real life projects, which not only provides them with new skills but helps them decide whether once they graduate they prefer working in design offices or on-site," says Ghossoub, who also earned a B.E. in civil engineering at LAU.

Dar Al-Handasah, a longtime donor to the university, provides a Beirut-based internship program aiming to equip students with the knowledge, skills and information they need to become empowered critical thinkers and confident innovators. LAU students make up a good portion of the internship participants, with many gaining employment upon graduation. In the past two years alone, more than 60 LAU graduates have been hired.

Dubai Contracting Company (DCC) is another LAU donor that is contributing to the university in an extraordinary way. Its internship program, known as DSLIP, offers 16 LAU and Syracuse University students a five week intensive training opportunity each summer in Dubai and is a testament to the company's commitment to both LAU and education.

"We are extremely grateful to have donors who give back in this tremendous way," explains Nassib N. Nasr, LAU's assistant vice president for Development. "Training and career opportunities are invaluable in their worth, providing lifetime experiences for our students and graduates."

Hydration and health

By Reem Maghribi

Exploring the essential role of the urinary system

Water is the vehicle through which the body expels waste and toxins rejected by organ cells. The kidneys are the powerhouses of this process, filtering a quarter of the body's total volume of blood each day and releasing one percent of it as urine. An average of between one and two liters of urine per day travel down two thin tubes called ureters to the bladder, a muscular sac that allows for infrequent and voluntary visits to the lavatory.



LAU President Joseph G. Jabbra gets a rundown from the head of the new urodynamic unit, Dr. Salim Zeineh, during a recent visit

"We practice a very multidisciplinary approach to medicine."

—Dr. Salim Zeineh, LAUMC-RH's urology department

Dysfunctions in the bladder, the sphincter muscle that opens and closes it and the urethra, the tube through which urine is expelled, can result in urine leakage, painful or frequent urination or recurrent urinary tract infections. The new urodynamics unit at LAU Medical Center-Rizk Hospital is decked out with imaging equipment that takes pictures of the bladder filling and emptying, pressure monitors that record the pressures inside the bladder, and sensors that record muscle and nerve activity, which all deliver precise measurements that enable tailored medical care.

"We had a portable machine for such tests before, but with this new unit we will ensure our residents are fully trained in these precise technologies," enthuses Dr. Salim Zeineh, head of the hospital's urology department for over thirty years.

Zeineh teaches LAU's medical students courses in endocrinology, nephrology and urology and foresees use of the new unit by medical practitioners and researchers specialized OF THE HUMAN BODY
is made up of water

DAYS
is the average time
a person can survive
without consuming water

LITERS OF FLUID
are filtered through
the kidneys each day

LITERS OF URINE
are expelled through
the bladder every day

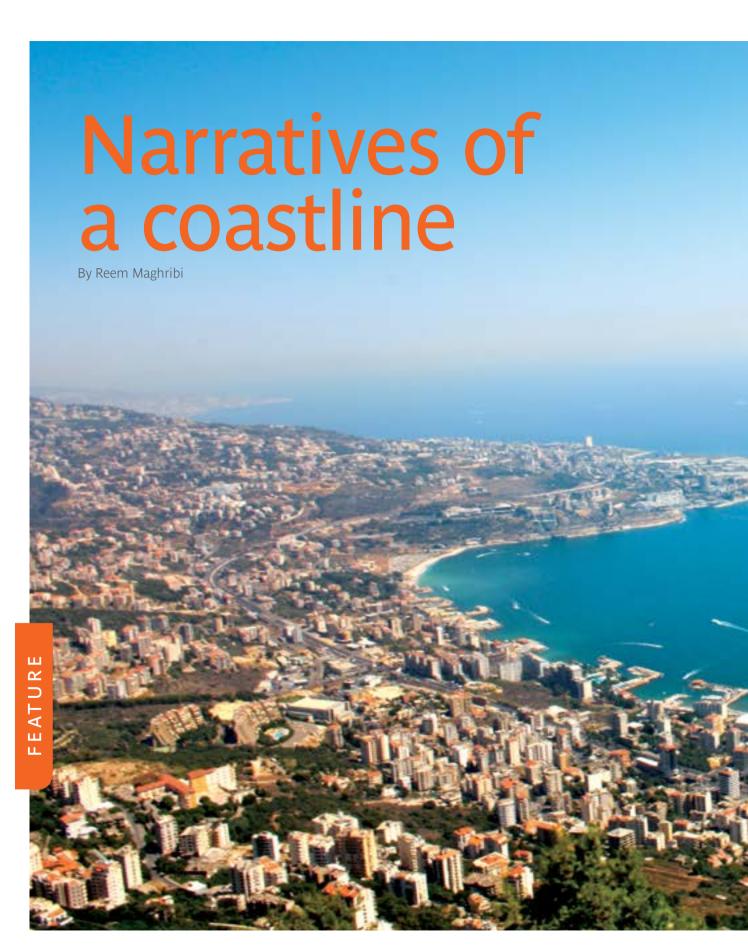
in those fields as well as in neurology, neurosurgery and gynecology.

"We practice a very multi-disciplinary approach to medicine," boasts Zeineh, citing as an example the weekly meetings held between the departments of urology, oncology and radiotherapy to review the many cases of bladder and prostate cancer in his patients.

While many of the diseases treated at the department of urology are genetic, you can reduce your risk of kidney failure by maintaining a healthy weight, reducing salt intake, eliminating smoking, limiting use of over the counter medications, and drinking 1.5-2 liters of water daily.

Adequate hydration is essential, as without water our bodies would simply wither away. In addition to its vital role in our urinary system, water promotes cell regeneration by delivering nutrients throughout the body, regulates body temperature thanks to its large heat capacity, lubricates joints, and absorbs shock to protect the brain and other organs.







People view a coast and all it has to offer in many different ways. Some may look back at it while swimming in the sea, whereas others may prefer to admire it from dry land while strolling along the promenade or just standing still, often with fishing rod in hand, mesmerized by the movement of the waves as they ebb and flow

Many a memory has been formed along Lebanon's long waterfront. We asked members of the LAU community to share some of theirs.

'Mina el Hosn was destroyed during the war and is now unrecognizable after development."

—Walid Marrouch LAU associate professor of economics

A lost village and a dinghy on the verge of collapse

Reminiscing about the neighborhood he has called home since he was born, Walid Marrouch, LAU associate professor of economics, says, "Ain Mreisseh is my village. By the time I was born it had already been regarded as an integral district of Beirut for two generations, however the village feeling still lingered."

The 1976 extension of the seaside promenade commonly referred to as the Corniche and the so-called "hotels war" of 1976-1975 changed the fabric of the area and the people who lived there, he recalls. "As a child I lived through the transformation. I witnessed the last evidence of it once being a village and have seen it disappear completely during my lifetime."

Prior to 1976, the Corniche, first built by the French in the 1930s, extended only to the site of the old American embassy, which was relocated following a bombing in 1983. "Many of the employees of the embassy, who also lived in Ain Mreisseh, were granted visas to the U.S. during the early years of the war," Marrouch points out, noting that many of them,

like his uncle, settled in California. "As they left the area, others, displaced by the war, settled here. This simultaneous immigration and displacement changed the composition of the area forever."

Marrouch estimates that only a quarter of the current inhabitants of Ain Mreisseh come from families who lived there prior to the war. "As long as I am in Lebanon, I hope I can continue to live in Ain Mreisseh. But if things continue the way they are, it may become so expensive that I will be priced out of the area," he says with some sadness. The house in which his grandfather was born stands on land that is now part of AUB's campus.

Marrouch believes that the university both saved and destroyed Ain Mreisseh. "It kept what is a relatively empty and open space to the sea, but, at the same time, its expansion over the decades was at the expense of the village feeling." In more recent years, the area's old and charming buildings have been taken over by developers who have seen fit to replace them with expensive high-rises. "It's the same typical Beirut story. People are vacated for development and can't afford to move back. Ain Mreisseh is home to some of the most expensive real estate in the capital."

The neighborhood lies directly to the west of Mina el Hosn, home of the hotels that played host to various militias and extremists in the early years of the 1990-1975 civil war. "It was destroyed during the war and is now unrecognizable after development. By the time Solidere was established, the area had lost its fabric. Not only the buildings, but the social fabric too. It was an area that existed on the map but in reality it had ceased to exist".

One day, while in a dinghy on the border between Ain Mreisseh and Mina el Hosn, Marrouch's own life came under threat. "My neighbor and schoolmate Samir and I were in a dinghy. We were checking out the structural work on a new pier, just as we had done most days that summer, when a huge piece of construction splashed into the water, missing us by centimeters," he recalls with great amusement.

Malak at the beach





An escape for those who had fled

"My father's family is from the city of Acre in Palestine. They tell me it's like Byblos, with its port, castle and fishing harbor," says graduating student Malak Abdel Ghafour, visualizing the coastal town from which her father fled at the age of seven

Abdel Ghafour's father grew up in the Palestinian Beddawi camp in Tripoli and her mother in the Burj el Shemali camp in Tyre. She herself spent her youth in

"My father is from Acre. they tell me it's like Byblos."

> —Malak Abdel Ghafour, LAU student graduating in social work



the Shatila camp in Beirut. Like most of the UNRWA-run Palestinian camps in Lebanon, they are all relatively close to the coast

"The seaside is the only escape for many refugee families with limited means, unable to afford access to pools or gardens," explains Abdel Ghafour, who is graduating this summer from LAU's undergraduate program in social work, which she joined on a full merit scholarship.

She has already completed internships with United Lebanon Youth Project, offering advice about university education to high-school students, and UNRWA, for whom she undertook socio-economic assessments of families requesting construction assistance. "I don't see social work as a study... what we read we must enact or else we're doing nothing. I've been building my bridge to the future."

Abdel Ghafour hopes her future will be in Lebanon, although five of her eight siblings live in Sweden, Denmark and the UAE, all countries with very long coastlines too. "Our father used to take my siblings to the beach on weekends to make sure they learned how to swim," she recalls, the youngest of the family. She did not experience this ritual herself, because by the time she was born her father was chronically ill. "I do however remember the fish my cousins used to catch on weekends and bring back to Shatila for us to cook and eat."

Waves at sunset form abstract strokes of beauty

Among the first to graduate with a degree in fine arts from Beirut University College (now LAU) was Sidon-based artist Samia Osseiran Jumblatt. After graduating in 1965. Osseiran Jumblatt journeved to Italy



Rae and Sacha at the LAU swimming pool

"I have been greatly influenced by the sea."

—Samia Osseiran Jumblatt, LAU alumnae and artist

Osseiran Jumblatt recalls fond memories of her time at BUC and of her childhood in Sidon. "As a young girl, I used to swim in the sea in a stretch of coast near Tyre owned by my family. I would invite girlfriends over and also really enjoyed it with family and friends."

Osseiran Jumblatt no longer swims in the sea, and despite living some 100 meters from the coast rarely ventures to the shore. "I admire the sea from my home, watching sunrise and sunset through the window."

25 paintings of the sea, as yet untitled. "I have been greatly influenced by the sea since childhood and I enjoy painting in abstract and allowing my imagination to influence my work."

CONTRACTOR OF THE PARTY OF THE

Shades of blue and orange dominate the works. "I love sunset the most. I watch the sun dip into the sea every evening and like it most in winter when the forms are more varied and beautiful."

Willpower in the winter sea

Rea, 12, and Sacha, 6, are avid and competitive swimmers. Their mother, LAU instructor of English Amy Youssef Karame, encouraged them to take up the sport at a young age. "It's an excellent way to stay active and train your mind and body," says Youssef Karame, who brings her daughters to the LAU swimming pool three times a week for training.

Rea has been competing with the Jazeera swimming club since she was seven years old. She has represented the club, her school — International College — and her country in competitions both in Lebanon and abroad. "I like being a competitive swimmer, representing Lebanon and traveling," says Rea, who envisions continuing to do all three as an adult

Despite the many hours of swimming practice she puts in, Rea still enjoys splashing around in the sea with her friends for fun. For the past four years, she has also competed in the sea as part of the inter-club open water winter race. "The water in the sea is colder and it can be a little fearsome," admits Rea. Her sister Sacha also competed in the race this winter, swimming 50 meters out to sea and then back to the shore.

"I was very cold but I wanted to win so I pushed myself to keep going and came in second," recalls Sacha, who was, at the time of the race in December, the youngest swimmer, at five and a half years old. Looking toward next winter, Sacha has no doubt that she will compete in the sea again. "The older I become, the more swimming competitions I must enter."



LAU institute promotes social justice

By Reem Mahgribi

Bridging academia, society and policy in order to resolve conflict

The Institute for Social Justice and Conflict Resolution (ISJCR) will be hosting two international conferences focused on Syria toward the end of this year, two years after it was established as an LAU research center by Imad Salamey and Tamirace Fakhoury, respectively director and associate director of the institute.

"We aim to draw from comparative international research on resolution, reconciliation and intervention in divided societies," says Salamey, associate professor of political science and international affairs, describing the objectives of both the conferences and the institute as a whole. "We at LAU have an urgent mission to become proactive in providing mediators with ways to help end violence in our region."

for Peace, will bring together scholars and practitioners from across the globe to present best practices for conflict resolution within the Syria context. The other, in partnership with UNESCO and International Alert, will focus on Syrian refugees and access to justice in a culmination of research and workshops on the subject conducted by Fakhoury.

"In line with the LAU approach, we value cooperative work and aim to shape research within a collaborative culture," says Fakhoury, assistant professor of political science and international affairs, highlighting the many activities planned and already completed in collaboration with various organizations and individual scholars. This year, a partnership with the University of Southern Denmark will result in the presentation of workshops about social movements in Lebanon as well.

"ISJCR provides a platform for debate around a variety of topics at societal, state and transnational levels," explains Fakhoury. "We intend to operate as a liaison or bridge between academics, civil society organizations and policy makers to help produce innovative research on social justice and conflict resolution that has implications not only for academia but for the Lebanese and wider public spheres."

In addition to being a hub for knowledge production and sharing, ISJCR aims to aggregate data and scientific views by gathering and accumulating all available information about the characteristics and causes of conflict into a single database. "We want to move toward an empirical approach and turn research practice into a support medium for policy through publishing, conferencing and engaging with civil society advocates," explains Salamey.

To this end, the institute has been hosting international academics and locally based actors for a series of guest talks. Scholars from Harvard, Arizona, Exeter and Leeds universities, as well as civil society activist Nora Jumblatt, UN special coordinator Philippe Lazzarini, and IMF economist Najla Nakhle, have all taken the lead in discussions aimed at expanding the knowledge and horizons of LAU students.

"We want our recommendations to feed into advocacy agendas and campaigns," concludes Salamey.



"Recommendations can feed into advocacy agendas and campaigns."

—Imad Salamey, LAU associate professor of political science and international affairs

Instability, conflict and displacement are heavily affecting Lebanon and the region on political, sectarian, national and international levels. The institute's current focus on the Syrian crisis and its various dynamics will pave the way for further work related to other Arab countries.

One of the conferences, to be held in collaboration with the U.S. Institute

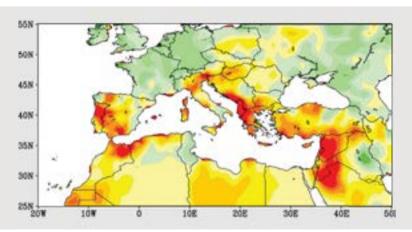
The climate change refugees are already here



Senior researcher at LAU's Institute for Migration Studies, Jennifer Skulte-Ouaiss, looks at the relationship between water scarcity and refugees.

SOURCE: National Oceanic and Atmospheric Administration (NOAA), from 2011 report detailing drought due to climate change using a comparison of annual rainfall in the period 1971-2010 and the previous 80 years in the eastern Mediterranean





The reality of human-induced climate change, though well documented, has only recently found its way into highlevel political and public discourse at the international level. Demonstrations of climate change are increasingly evident in droughts, super-storms and changing weather patterns that affect millions around the world. Indeed, in late 2015 in Paris, 196 countries signed the first framework convention on climate change. The groundbreaking document notes that: "Climate change represents an urgent and potentially irreversible threat to human societies and the planet and thus requires the widest possible cooperation by all countries."

Concurrently, the world is facing an unprecedented refugee crisis — in terms of numbers and where the refugees are heading — that is, from developing countries to developed ones. "Globally, one in every 122 humans is now either a refugee, internally displaced or seeking asylum," UNHCR reported in January 2015. The unparalleled mass of people forced from their homes and on the move within their countries' borders or crossing international frontiers is causing significant social, political, economic and environmental problems.

For the Middle East in particular, the predictions for increasing water scarcity and changing rain patterns hold the potential to be highly disruptive. In fact, some scholars point to long-term drought in Syria as being a key push factor in launching the ongoing war in 2011. Long a water-stressed country, increased competition for decreasing water resources due to persistent drought, population growth and inefficient farming methods — as well as non-water related causes such as the perception of increasing corruption within the Assad regime —

pushed growing numbers of desperate farmers out of the countryside and into Syria's already overburdened cities.

Seeking solutions to their plight, the farmers and others made many demands on a government that would not and perhaps could not meet them. Repressive state action and the entrance of external actors soon led to a snowballing conflict. Climate change — or more specifically, the drought — did not directly cause what has turned into a five plus year international war with over 400,000 dead, but there is significant evidence that the drought was a direct cause and a serious one.

Some may argue that Syria is a unique case in terms of the role of water scarcity in causing conflict, but increasing numbers of scholars would disagree. Indeed, water scarcity — and the larger effects of climate change overall — are contributing to conflicts in all regions of the world, from the western United States to Nigeria and Bangladesh. However, the severity of the conflict and whether it can be addressed via established political processes varies tremendously. Thus, while we don't expect California and Nevada to go to war over water, water scarcity is contributing significantly to the rise and reign of terror of Boko Haram in Nigeria and Cameroon.

More and deeper research on both climate change and migration is clearly needed. LAU is well placed to take the lead in the region on conducting interdisciplinary research on climate change and how this intersects with migration. Research in disciplines as diverse as biology, conflict resolution, law, civil engineering and computer science, as well as political science and sociology is needed to understand how and when climate change and migration are related and to what effect. Lebanon, together with the larger Middle East, is already facing the twin crises of climate change and migration. Who knows how much worse it may get as they become more frequently and more significantly intertwined?

As part of her focus on the relationships between migration, security, and national identity, Skulte-Ouaiss, who is also an assistant professor of political science and international affairs at LAU's Department of Social Sciences, is currently co-authoring a scholarly paper with graduating student Lara Dik, whose senior paper focused on whether or not climate change refugees pose a security threat.



Eyes half shut

By Linda Dahdah

Syrian refugee crisis focus of major spring production

"My aim is to move people, to push them to get in touch with their humanity again."

—Lina Abyad, LAU associate professor of communication arts

On April 20 I checked the news, as I have done every day for as long as I can remember. A headline in the New York Times struck me: "500 migrants may have died in sinking of boat in Mediterranean, U.N. says." I couldn't take my eyes off the accompanying photo of the Greek Coast Guard helping those who had survived find their way to land. The article reported that 23 Somalis, 11 Ethiopians, 6 Egyptians and a Sudanese had survived. I couldn't stop looking at these migrants' faces, wondering, where had they come from? Whom had they lost along the way? Did their families know that they had made it safely? What about those who had died?

The article remained open on my desktop for a few days. I would look at the migrants' faces again and again. It was reported that they had drifted at sea for several days. What went through their minds? What were they fleeing? How much money did they have to pay the smugglers and what did this money represent? What humiliations did they



have to suffer? I wanted to know their stories. I wanted to listen to them just as I listened to Hisham, Firas, Doaa and their companions in "misfortune" in Nom el-Ghezlan, LAU's major spring production directed by Associate Professor of Communication Arts Lina Abyad. Raw and heavy at times, the play is built on the true stories of Syrians who have been either imprisoned for their free-thinking (poet Faraj Bayrakdar), kidnapped for





The major production's actors too found that acting the parts of real people had changed them.

Carla Saab played Doaa, a 19-year-old Syrian who crossed the Mediterranean Sea from Egypt on a fishing boat along with more than 500 refugees. The boat sank and her fiancé drowned. She could not swim but managed to save two children who were given to her by their parents who had lost their ability to go on. In 2015, thousands died while trying to reach European shores.

"My sense of humanity changed," Saab says. "I am much more aware of what is happening around me now and more involved."

"This play helped us see that this 'group' — as it is portrayed by the media — is in fact made of individual people, who have their individual struggles, lives, aspirations and dreams. They are not just numbers anymore, they become human, it gives a face back to these people," says Rami Saidi, who played the part of a European politician whose contradictory speeches reveal

the ambiguity of the host countries' official position toward the migrant crisis.

"I was amazed by the reaction of the audience to the play ... This play has changed the way I look at theater and the possibilities it offers, especially in Lebanon," says Omar Bakbouk, a Syrian national who has only been in Lebanon for ten months. In the play, he played a smuggler of migrants, an individual only interested in the money he can make.

"We cried and laughed a lot while researching our characters and rehearsing our roles," says actor Walid Saliba. He was moved by the story of Hisham and Firas, who decided to swim from Turkey to Greece. They had planned to rest on two islands on the way but couldn't and swam for five hours non-stop, losing hope at times with an overwhelming urge to let go. "I question things a lot now," he says. "I definitely don't look at the sea the same way I used to. I am not sure I can even swim in the sea anymore."



their activism (Samira el-Khalil), or who made the choice for life — even at the risk of losing it — by crossing frontiers and seas to get away.

Nom el-Ghezlan means "The Sleep of the Gazelles," and describes the phenomena of sleeping with your eyes half shut. The premise of the play is that many who live under dictatorships do just that, merely "living" and forgetting the fact that they are denied their basic

human rights. Like all of us who watch these tragedies without really seeing the human disaster, I would often see, out of the corner of my eye, an article similar to the one that stopped me in my tracks that day and then simply ignore it.

As Syrian writer Dima Wannous puts it, "In a one-hour performance, Lina Abyad has managed to kill the idea of a featureless Syrian population, an inert group of people with no dreams, no

hope." In fact, she says, "not being able to save these people, she managed to salvage their memories and their stories." Lebanese poet Youssef Bazzi similarly expresses his admiration for the artist who refutes the unacceptable status quo. "From numbers, Abyad gave refugees a name," he says, "and this is a great act of defiance. When one defends other people's humanity they save their own."

In describing the motivation behind her play, Abyad passionately told me that "my aim is to move people, to push them to get in touch with their humanity again. This is what theater is about. It is about transforming and bringing about change."

Yes, I thought, and this is how it touched me. I have changed! My eyes are open today, widely aware of an empathy I had lost while selfishly trying to protect myself.

Proud to give back

By Federica Marsi

LAU supports its most outstanding in obtaining a Ph.D. from the world's leading institutions

"We sponsor our best and brightest, so they can access top universities."

> —Said Ladki, interim dean of LAU's Adnan Kassar School of Business

Being accepted into a top-notch university is a hard task indeed, but unfortunately it is not enough to guarantee enrollment. The euphoria that accompanies an acceptance letter can soon be replaced by worrisome thoughts about the funding prospects.

Since 2009, LAU's Adnan Kassar School of Business (AKSOB) has been supporting its students in the pursuit of a Ph.D. in top universities in the U.S. and the U.K. "We take our best and brightest, and sponsor them so that they can access top universities," says Said Ladki, the school's interim dean. "They are then offered the opportunity to give back to LAU as professors."

Those who have been sponsored are offered a five-year full-time academic position. "What is great about this program is that it not only funds your studies, but also ensures a job for the immediate years that follow," says Amine Abi Aad, assistant professor of management at LAU and recipient of a Ph.D. sponsorship at the University of Alabama, whose business postdoctoral programs rank among the best in the U.S.

An M.B.A. and a B.S. graduate in industrial engineering from LAU, Abi Aad has been a member of the Academy of Management — a preeminent professional association for management and organization scholar — since 2010 and of its regional affiliate, the Southern Management Association, since 2011. "Coming back to my country was important to me and having an academic position secured ahead of time helped me in that," he explains.

Since the program started, LAU has sponsored 12 students who have enrolled in institutions as prestigious as Durham University, the University of Manchester, University of Glasgow and the University of Central Florida, among others.

According to Ladki, the sponsored students who have come back to teach at LAU have also greatly contributed to the latest AKSOB success, its accreditation by the Association to Advance Collegiate Schools of Business (AACSB). "Faculty resources play a big part in the evaluation criteria," he points out. "And the growing number of highly trained professionals coming back to LAU impacted on its ability to meet the requirements."

Jamal Maalouf, a 2009 graduate with distinction in computer engineering, also saw her career take off thanks to LAU's support. "Having a sponsor allows you to focus purely on academia and not have to worry about anything else," she says. Upon graduation, she completed her Ph.D. at the University of Alabama. "I am happy to be back to teach in Lebanon because, as the saying goes, you don't throw stones in the well you drink from."

This experience not only boosted her computer engineering skills, it also gave her an asset in the academic field. "When students ask me what path they should follow in their career, I am able to give them advice based on the global market," says Maalouf. "I am translating what I learned into what I teach and I try to open their eyes to new opportunities they might not otherwise see."



Jamal Maalouf and Amine Abi Aad with another sponsored student, Rabih Nehme

What's in a sky

Nelly Mouawad, LAU assistant professor of physics, spends a great deal of time peering through telescopes. Although her research focuses on comets and the planet Mercury, Mouawad is also interested in the dynamics of the stars at the center of our galaxy.

When we look at the history of humanity, we see that our race has progressed in leaps and bounds alongside key scientific advancements. More often than not, major discoveries in astronomy were an awakening to humanity and transformed our way of thinking and living.

Two million years ago, humans evolved in Africa. Not knowing much about how things worked, they slowly explored the wilderness around them. Later they ventured further afield and eventually travelled the world. It is evident that we were explorers of the most curious kind, and today, we are no less than that. What is not obvious is how those early people looked to or understood the skies. However, we do know that for the first civilizations, the stars were an intrinsic part of their becoming and lives.

no longer think that we are the center of the universe and that the stars are fixed in the sky. We now know how and when the stars were formed and when they will die. We know that our universe came into existence 14 billion years ago and that it might one day cease. We know that the atoms which make up our bodies were once formed inside of stars and that the hydrogen atom in each cup of water we drink is as old as the universe.

Among all the galaxies, stars, planets and bits of matter, humans seem to be — as far as we know — the only objects that can think. But new scientific results imply that we may not be alone. We might actually be on the verge of discovering distant alien races that are completely different from any life known to us on Earth. How will this then affect the future of our species?

We are unraveling so many new small and large-scale facets of the universe that in a decade from now we may look back at today and think that we lived in a very archaic past. From our current vantage point however, I see us leaping into a new transforming epoch. Five decades ago we visited our closest neighbor, the moon. In a couple decades, our children and grandchildren might be visiting our neighboring planet Mars while camping on the moon.

Today, astronomy is seen as the solution to save humanity. Our space exploration is analogous to the first steps that humans took two million years ago. Many people believe that Earth will not stay our only home, that soon it will become too small or too polluted for the human race. The idea being that we should harvest the abundant water and other resources in the solar system, but that in itself could have transforming consequences for our species.



In many ancient civilizations, astronomy was used to develop calendars and determine the seasons for agricultural reasons or as tools for regulating communal activities. Across the globe, archeological ruins of ancient monuments, such as Stonehenge in England and the pyramids in Egypt, show the connection that civilizations had with the skies. In these cultures, cosmology was a living, religious philosophy that ruled their lives.

When we can build a story based on an understanding of scientific facts, our views and life become revolutionizing. Today, we







to the increase in water demand rather than a decline in its overall quantity — handling them effectively is of paramount importance.

"What we are running out of is 'cheap' water, the one we only use once," says Wolf. "If managed efficiently, we will never run out of water because it is reused over and over again."

Israel and Australia, for instance, have hit their supply limit but manage to deal with the issue internally through desalination and more efficient farming methods. Those countries that cannot implement such expensive measures can still solve the problem in-house by improving water management in agriculture — which, on average, accounts for two thirds of the overall demand.

"There are three things that can be done when you start running out of water: adapt, move or suffer and die," says Wolf. In modern societies, the process of adaptation is led by a political response taken by governments and applied at the national level. If the enacted solutions are not effective enough, water risks becoming a dangerous trigger for social unrest.

Unlike other countries in the region, Lebanon is blessed with water. Its estimated availability is 1350m³ per year per capita, compared to 250-300m³ in neighboring countries. But water abundance does not prevent Lebanon from facing the problems affecting the region overall.

The National Council for Scientific Research (CNRS) has identified a number of physical and anthropogenic challenges that lie ahead for Lebanon, including the impact of climate change on water resources, an increase in water demand due to population growth, a deterioration in quality due to the absence of environmental controls, and the lack of expertise to handle this resource.

"Our problem lies in the mismanagement of resources and the scarcity of qualified people to control them," says Amin Shaban, a hydrology expert at the CNRS. This adds to a complicated geology characterized by fissures that swallow groundwater into unreachable aquifers and steep slopes from which water runs off into the sea.

New tools are being used to produce research that will lead to successful

solutions, such as remote sensing (spacebased) techniques — which are cheap and can cover large areas — combined with the Geographic Information System (GIS) to manipulate and store data in digital form.

The process of information gathering relies on decisions made at the institutional level in order to become effective. Other concerned institutes,

"The first step toward water cooperation must be transitional justice."

— Joshka Wessels, post-doctoral fellow in peace and conflict studies

such as ministries and universities, can use the data and information gathered by the CNRS to explore, monitor and assess water resources and the use of water for agricultural purposes.

"Unless these challenges are treated properly," says Shaban, "all future scenarios and projections reveal that Lebanon is going to have a serious problem and water will become a very expensive commodity in the near future."

According to Jean Chatila, LAU associate professor and Beirut campus engineering programs coordinator, "in the Middle East, water security, like food security, is a matter of survival." In Lebanon, the priorities are to treat wastewater prior to disposal to avoid contamination and to achieve proper management of water resources systems.

"Pollution from industry, urban wastewater and agricultural run-off reduces the quality of fresh water sources," says Chatila, adding that new sources of water have become scarcer and more expensive to develop, while competition among the various users has increased. "More disturbing are the uncertainties surrounding the potential impacts of climatic change and global warming on the rain patterns and hence on water resources," he concludes.

Home to 6.3 percent of the world's population, the Middle East contains only 1.4 percent of the world's renewable fresh water. The region is characterized by a close correlation between water cooperation and peace, and the absence of cooperation and risk of war.

Israel and Jordan upgraded their water cooperation in 2013 and enjoy relative peace by regional standards. Israel does not have water cooperation agreements with Lebanon and Syria and, similarly, the

prospect of war regularly looms.

According to Sami Baroudi, professor of political science and assistant dean of the School of Arts and Sciences at LAU, social tensions are preventing the parties involved from taking action on water. "There are political challenges that need to be dealt with before there can be cooperation on water," says Baroudi. However, he also sees how this could have a beneficial outcome. "Water could act as a conduit for peace if included in the future peace settlements in Syria and Iraq," he adds.

This view is shared by Joshka Wessels, a post-doctoral fellow in peace and conflict studies with a focus on the Middle East and water at Lund University in Sweden. "The first step toward water cooperation

"Water could act as a conduit for peace."

—Sami Baroudi, LAU professor of political science

must be transitional justice, which is not easy to obtain in the immediate future," says Wessels. If various parties and forces within a country are not willing to collaborate, little can be done to achieve a stable agreement — politically or about resources. In addition, when past traumas and hostilities are not overcome

or reconciled, these issues can haunt negotiations, leading to an imbalance of power.

Even if cooperation is apparently in everyone's economic interest, the willingness to cooperate is based on a wider variety of dimensions, including trust, perception, experience, empathy and identity. "Middle Eastern countries have not yet reached the point at which they see mutual benefit in cooperation," says Wessels. However, there still is room for optimism. "States will eventually realize that cooperation is mutually beneficial," she says, "but this step must follow a process of decolonization."

What is also promising is that, once reached, water treaties have proved to be resilient — take those between Lebanon and Syria or Jordan and Israel, for instance. According to Aaron Wolf, this is because it is clear to all parties that cooperation on water is much more desirable than conflict. "When you picture going to war over water you picture you are running out of drinking water, but this almost never happens — and if it did, no one would have the physical strength to wage a war anyway," says Wolf. "It is also not conceivable to go to another country and seize water — a cubic meter of water weights a metric ton. Considering the cost of war, finding new ways of using every drop of water over and over again is likely to be the most viable solution."





Inside the global classroom

By Paige Kollock

LAU leads largest-ever Model UN conference in New York



There is but one opportunity for world leaders to come together and discuss issues that affect the planet and its inhabitants: the annual United Nations General Assembly meeting, held each September at the UN headquarters. But this past spring, 3,682 somewhat shorter delegates from around the world had the chance to experience that unique melding of cultures at the Global Classrooms International Model United Nations Conferences in New York.

The three-day conferences in March and May were run by LAU. The gatherings brought together 1,724 middle school students and 1,958 high school students, representing more than 30 countries. Kids as young as 11-years-old, clad in business suits and carrying around binders as big as they were, stood before hundreds of their peers, speaking passionately about why the Central African Republic needed more food aid or why the international community should pressure the Syrian government to allow medical equipment into besieged cities.

Huddling in groups on separate sides of the room, they discussed ideas for disarming rebel groups and shot up their



placards, a symbolic request for a turn to speak on their country's behalf. "Granted," says the chairman of the mock "Security Council," himself a university student, banging down the gavel.

The young delegate simulating Lithuania steps up to the microphone to challenge Russia's policy on refugees: "Lithuania would like to point out that Russia has a huge expanse of territory, a lot of space for refugees to live in. It has to be considered that these people are human beings and that they deserve to live in a place that's safe and sanitary!"

Standing outside the United Nations Secretariat Building was diminutive Alfa Yasmine, a seventh-grader from Ghana who simulated Nicaragua in the UN High Commission for Refugees. "Although it is a democracy, Nicaragua has many problems," she explained. "They have problems with child labor and they are not trying to combat it!" she said, taking a serious tone. "We made some progress, but there is a long way to go."

Addressing the young delegates from the podium in the United Nations General Assembly Hall, UN Youth Envoy Ahmad Alhendawi said, "Human beings have existed on this planet for thousands of years, but it was only 70 years ago that man and woman came together and found a way to talk to each other." For these students, born and raised in a connected and globalized world, the idea that such a global forum never existed may seem incomprehensible, but the idea that each country, no matter how big or small, rich or poor, gets one vote, is an egalitarian idea they can hold on to.

"We had to take a test. When we got the letter that we had been accepted, we were so excited. We represent Spain in various committees, such as the FAO, WFP, UNESCO, UNICEF, GA3, GA1 and others."

—Zeinab Khal, An-Noor Academy, New Jersey, 6th grade

"I participated in Model UN conferences before, but this conference is more diverse. I've been assigned to represent Syria during the FAO and the WFP committees on malnutrition. I hope to bring together other countries suffering from the same problem to create a global program to stop malnutrition."

—Sebastian Diaz-Herrara, Shelton Academy, Doral, Florida, 6th grade

"We researched for many weeks before we came. I'm representing South Africa in the Human Rights Council."

-Elena, Istanbul, Turkey, 7th grade











Postcard from New York

By Paige Kollock

Leading up to the summer of 2016, LAU NY hosted an orchestra, held a dance performance, and organized a panel discussion and tasting about Lebanese food.







The sweet and sultry sounds of traditional Arabic music reverberated in the corridors of LAU NY on the evening of March 11, when the New York Academic Center — in partnership with the Lebanese Consul General in New York — welcomed the cofounders of the New York Arabic Orchestra for a very special performance. Musicians Bassam Saba and April Centrone played in front of a sold-out audience, performing a diverse repertoire of songs that ranged from classical to contemporary, including selections from Farid al-Atrash, Fairuz and Ziad Rahbani to traditional Arabic-Turkish music such as a *longa* and a *semai* in d-minor by Mesut Jamil. They played the *oud* (Middle Eastern lute), the nay (Middle Eastern flute), the buzuk (lute), the ria (tambourine), the western flute and other world percussion instruments. Their duet was an impressive display of musical genius, as the pair seamlessly switched from one instrument to the next, improvising as they went along and transfixing the audience in a way only music can.



Connecting Through Dance

On April 28, LAU NY welcomed FJK Dance for an evening of Connecting Through Dance: The Art of Fusing Various Dance Styles. Nine talented and established dancers — hailing from countries as diverse as Italy, Cuba, Mexico and Turkey — stunned the audience with their ability to effortlessly blend Middle Eastern folkloric dance with classical ballet, modern, jazz and ballroom to create a new, unique dance language. In between dances, the company's founder Fadi J. Khoury explained the origins of certain Middle Eastern dance moves and how his love of that culture, developed during his childhood years in Lebanon and Iraq, inspired him to weave those movements into the company's choreography. "Growing up in conflict zones, I found solace in dance, music and art," Khoury says. "But the Middle East is not just about conflict. There is beauty and passion, and it's my goal to show this through my work." The closing performance of Dum Tak, music often associated with Arabic belly dancing, had the audience swaying in their seats.



Food and Identity: Celebrating Lebanese Cuisine

New Yorker foodies were able to sample bites of dishes many of them could barely pronounce — kibbeh, sujuk and fassoulia, to name a few — at an event titled Food and Identity: Celebrating Lebanese Cuisine in New York on June 9. The evening began with an animated panel discussion featuring Lebanese food entrepreneur Manal Kahi, Charlie Sahadi (the founder of Sahadi's, an iconic Lebanese family grocery store in Brooklyn), Matthew Jaber Stiffler, research and content manager of the Arab American National Museum in Dearborn, and Philip Massoud of the award winning Ilili Restaurant. They spoke about how Lebanese Americans construct their identity through preserving the food of their ancestors. Following the engaging discussion, which also touched on more serious topics of identity and immigration, the guests were invited to whet their palates with tastes of food from some of the city's top Lebanese restaurants and caterers.

Leading with kindness

By Naseem Ferdowsi



By living a life of compassion, Mona Bawarshi, president and CEO of Gezairi Transport, has grown her sea freight company into a regional player.



"The world and business are moving towards aggression and power, but I sing another tune," says Mona Bawarshi, president and CEO of Gezairi Transport, a family-owned sea freight company based in Beirut.

Bawarshi is referring to her philosophy in life and business, which is simple: be kind to others. She has used this approach for more than 45 years as she navigated her company's journey from a small customs clearing office to a regional shipping player, distinguished for its expertise in freight forwarding, warehousing and distribution.

"So many of the world's problems can be eliminated by being kind."

—Mona Bawarshi, president and CEO of Gezairi Transport

"I startle people with my 'hellos' and 'good mornings,'" she says. "People are absolutely surprised by a friendly greeting these days." Bawarshi conducts her daily life with kindness, whether she's managing operations at Gezairi's headquarters in downtown Beirut or trying to make her next flight to one of her company's 22 offices located in six countries.

Her father established Gezairi Transport in 1945. More than 70 years later, little has changed, according to Bawarshi. "The port is still a source and way of life for so many. Of course, technology and competition have affected our industry, but water is still the way we move goods," she affirms.

With waterways remaining an important way to transport goods, Bawarshi believes

the need for education in the field is crucial. "At a young age, we – as Lebanese – learn from geography books that we live on the sea and are a transit country with an important port. All of which is true, but for some reason our learning stops there. We need to educate students so they can take advantage of this important resource," she says.

To be sure, learning on the job is an important way to gain the necessary skills and knowledge for a career in shipping, similar to the manner in which Bawarshi entered the industry. Recalling the first few years of her time at Gezairi Transport she says. "We all came and learned on the job, but it wasn't easy. Back then and even today, you rarely find a person at the port who has a degree specifically related to the industry," she points out, insisting that "this needs to change."

Bawarshi is a proponent of education in general and made a generous building donation to LAU in 2012, which allowed the Beirut campus to grow considerably. The donated Gezairi building, located in the heart of Hamra near campus, now houses the university's fashion design program and will be refurbished to accommodate more programs and classes.

Beside education, Bawarshi firmly believes in karma and kindness, and credits her success both in life and business to these values. In fact, when asked what principles LAU should instill in its students, she says compassion is all you need. "If we are kind to our planet and its resources, and kind to others, so many of the world's problems can be eliminated," she says. "It's very basic and it starts at LAU, and has the potential to spread. Kindness is all we need."

Open your ears

By Rami Saidi

LAU's major music production invites audiences to sit back, relax and listen to the show Jazz in the Living Room is the fourth major music production by Martín Loyato, assistant professor of music in LAU's Department of Communication Arts. The Argentinian director, feeling drained by his previous efforts, chose to take a seat this time (on stage, at least) and give the audience a chance to enjoy an eclectic selection of jazz arranged by the LAU Mosaic Ensemble.

"I was so exhausted that I thought why not do a jazz concert on a couch set in a living room and play sitting down," explains Loyato. Entering Irwin Hall Auditorium, the audience came face to face with a stage bathed in reddish light and consisting solely of musical instruments and equipment, two large couches and a lamp. The mood was instantly set, transporting the viewer from Beirut to a cozy lounge in the French Quarter of New Orleans.

One after the other eight talented musicians made their way onto the boards, took up their instruments and started playing, immersing the audience in an elaborate and emotionally packed program ranging from traditional

1920s funeral songs to immediately recognizable classics such as *I Put A Spell On You*. This was quite a feat, considering that some of the musicians had never sung or played an instrument before rehearsing with Loyato for this event.

Far from being a run-of-the-mill concert, the show was an exercise in listening for both performers and spectators alike as they delved a little bit deeper into one of music's most complex and venerated genres. Jazz was chosen specifically because of its complexity, which required the musicians not only to listen attentively to one another but also to react to unplanned changes swiftly and communicate without words.

"In jazz you have to be able to improvise, to create and say something on the spot, not knowing what's going to happen next," elaborates Loyato. "Like many other forms of traditional music, the beginnings of jazz were oral. Its history only became complicated when musicians started training and then the language got very intricate."

For many of LAU's students — who



have a wide array of talent to offer in the field of music — Jazz in the Living Room was a golden opportunity to experience something new. "Jazz offers a particular approach in terms of listening to music that no other genre has," states 20-year-old LAU performing arts major Jawad el-Mawla, the production's assistant musical director. "It's important for students to experience how a piece of music can be treated in a jazz context."

Loyato didn't expect the students to become jazz musicians, "but maybe after this experience they will want to explore it more... My idea was to expose them to how this language works and what the components within are."

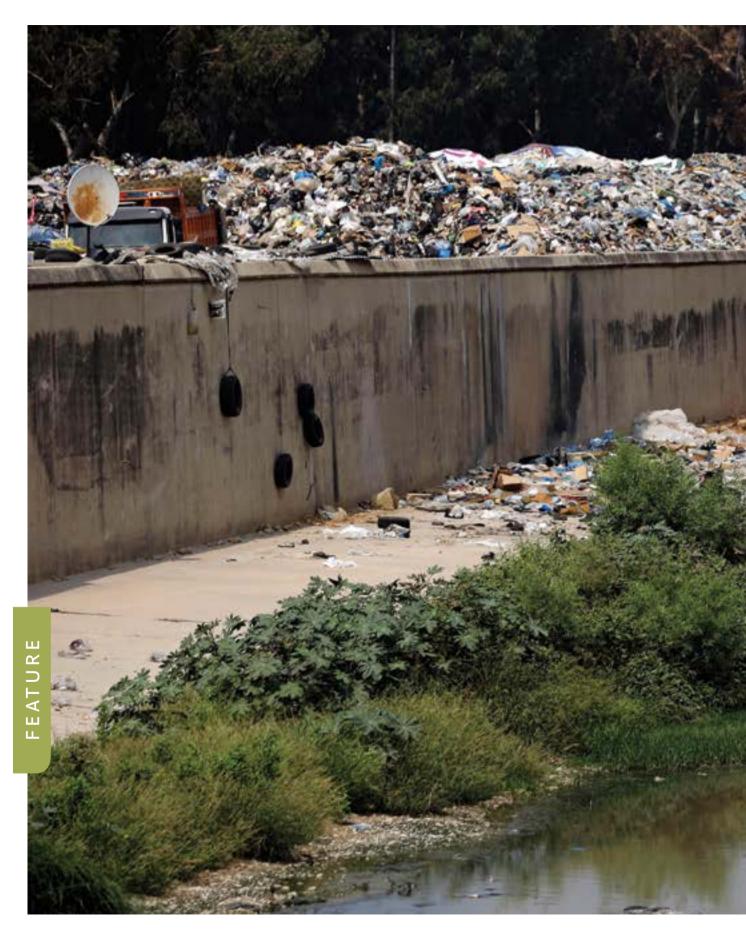
From the opening number 'til the curtain call, the performers displayed a remarkable comfort with the musical genre they had to come to grips with over a period of just three months. *Jazz in the Living Room* was hardly the case for Loyato's hope that people would see the show as a metaphor for a life in which we are losing touch with the sense of listening. Instead the audience was spellbound.



"After this experience, I hope they will want to explore jazz more."

—Martín Loyato, LAU assistant professor of music





No time to "waste"

By Gaja Pellegrini-Bettoli

As the unmanaged garbage crisis threatens the water supply in Lebanon, a look at possible solutions to offset health and environmental risks

The Italian Renaissance polymath Leonardo da Vinci described water as "the driver of nature." In Lebanon today, this vital resource is at risk of becoming permanently contaminated due to the unresolved garbage crisis, which has been ongoing since last summer. Rainfall has also contributed to spreading the threat to public health. Rain encourages garbage to rot into the soil, leaching into underground natural wells and fossil water, carrying pollutants that can be a health hazard for the population and spread diseases such as cholera, typhoid and dysentery.

"The infestation epidemic is no longer an option, it is becoming a fact. If the crisis does not stop, we should expect severe short-term and long-term consequences for the health of Lebanese citizens," warns Hussein Hassan, an assistant professor at LAU's Department of Natural Sciences, who specializes in food safety. There are solutions that could contain and minimize the impact of the crisis, if implemented promptly, but the Lebanese governmental institutions responsible for forming and implementing a viable plan have been unable to resolve the situation.

Waste management in Lebanon has been a problem for decades. Prior to the Lebanese Civil War (1975-1990), municipalities were in charge of garbage collection. After the conflict, some parts of the garbage collection system were privatized, explains Makram Ouaiss, assistant professor of international affairs in the Department of Social Sciences at LAU.

"There are several engineering solutions that could resolve or alleviate the current solid waste crisis," states Mahmoud Wazne, an associate professor at the civil engineering department of LAU. Different solutions exist: sanitary landfills, incinerators, refuse derived fuel or anaerobic digesters. Each option comes with advantages and disadvantages. For example, in his opinion, sanitary landfills might be the most appropriate choice for Beirut, as long as their functioning is monitored and follows international standards. It is political constraints that remain the biggest obstacle, preventing any efficient implementation. For this reason, for the time being "mitigation measures including solid waste separation (at the source and at the temporary sorting places) could offer some relief," recommends Wazne. For professor Ouaiss, reduction at the source is important, highlighting the need for legislation to limit the use of plastics and other nonrecyclable products.





The three professors identify the main source of the problem to be tied to political and governmental constraints, both at central and municipal levels. Ouaiss highlights the need for greater transparency on the part of the institutions, Hassan underscores the need for the government to set-up a task force of experts, while Wazne emphasizes the necessity for the government to closely monitor proper implementation of whichever measure is chosen.

It is not the first time Lebanon has endured a garbage crisis. Before the civil war, when it was the responsibility of the municipalities to collect and treat waste, the situation was neither satisfactory nor coordinated between the different governorates. Additionally, other countries (Germany and Italy) tried to export their toxic waste to Lebanon, further complicating the local problem of responsibility. Ironically, during the war Lebanon signed the Basel Convention on the Control of Trans-boundary Movements of Wastes and their Disposal (1989), which was designed to reduce the movement of toxic wastes from developed countries to less developed nations.

Ouaiss highlights how the chaotic situation that followed the civil war exacerbated the treatment and collection of waste. The problem of privatization is that while 80 percent of the garbage was supposed to be recycled, only 20 percent actually was. He believes that at present the strongest threat comes from the garbage which has accumulated in the mountains over the past eight months and that water should be treated before it reaches homes. He also draws attention

to the existing water treatment stations in Lebanon, which remain unutilized.

Recent scandals concerning proposals that waste treatment in Lebanon be handled by Russia and Sierra Leone are emblematic of a lack of political transparency. For Ouaiss, "the current situation, which is the result of over eight months of inaction, has several solutions which are less expensive to implement and environmentally sound but which fail to be considered due to political reasons."

In the meantime municipalities are dealing with the problem in different ways. Some have implemented positive initiatives, establishing sorting at the source and opening composting plants. However, those operating in this manner are few. Professor Wazne mentions the municipality of Zahle as an example of a positive role model for sanitary landfills.

There are tons of accumulated, untreated garbage which can no longer be recycled because the organic matter mixed in with it has started to decompose and can no longer be separated. This waste needs to be treated and stored separately. The popular civic movement born out of the crisis last summer, YouStink, believes it is the role of the Lebanese public to decide which landfills, if any, should be opened to allow them to be filled with the 600,000 tons of accumulated waste. At the Naameh landfill, for example, the measure was not welcomed by a large section of the Lebanese public and the trash had to be brought in under army escort. According to Jinane Abi Ramia, a YouStink activist who has been involved in the sit-ins and protests since last summer, the government "issued a very harmful

solution that does not comply in any way with international environmental standards. The solution contributes to the leakage of leachate into water. Ultimately, bacteria drawn into the water will result in adverse affects on marine life and the inhabitants of the area."

The Ministry of Health in Lebanon is now suing the municipalities that have resorted to burning their waste. This is not an efficient solution, but many local authorities are unable to deal with the current crisis on their own. The problem has become increasingly urgent and, as noted by Hassan, "different ministries should unite and work together to drawup a long-term solution which is effective and can resolve the unprecedented dimensions of the issue."

The garbage crisis has exposed the lack of a clear national strategy to halt the consequences of water pollution. It is not a new issue but the problem

"Water is the one substance from which the earth can conceal nothing. It sucks out its innermost secrets and brings them to our lips."

—Jean Giradoux (1882-1944)

of water pollution is becoming rapidly more urgent. Hassan explains that, "in fact, the Litani river has been polluted for decades, adulterating food supplies, particularly in the Bekaa, where it provides "Water, like religion and ideology, has the power to move millions of people."

—Mikhail Gorbachev (March 12, 2000)

the main irrigation source." The geological composition of Lebanon, mainly carsick rock, has compounded the problem, as this soil can be easily contaminated. This has resulted in a significant level of pollution from dumped and landfill garbage that water treatment facilities cannot treat properly.

Food safety is also affected, due to the fact that the garbage has now piled up for months. Organic leftovers in the garbage piles attract insects and rodents that help spread contamination. This has already started to occur and there have been outbreaks of food borne illnesses among Lebanese citizens. In the short term these diseases are typhoid, bloody diarrhea and salmonella. Hassan draws attention in particular to the accumulation of heavy metals in the human body and its longterm consequences. This accumulation brings about chronic illnesses such as damage to the nervous system, miscarriages and cancer. He adds, "when the trash is burnt it releases dioxins and persistent organic pollutants in the air which then deposit on trees and crops." Seawater is also being affected because the garbage juices that reach the sea will persist for a long time, causing a dangerous health hazard for swimmers during the summer. Furthermore, the risk of accumulation of carcinogenic heavy metals in fish and seafood will be compounded.

Fortunately, as winter ends, rainfall has diminished. But now there is another problem: microorganisms and insects that thrive in the heat and feed and breed on the garbage bounty. With the beach season approaching and sea pollution increasing exponentially, severe short and long-term consequences on the health of Lebanese citizens can be expected.

So far, there are no reliable reports to quantify the impact of this crisis in terms of repercussions on health, according to Hassan. It cannot be determined, for example, if the outbreaks of water poisoning are caused by the garbage crisis or if they are linked to other

pre-existing conditions (for example, the contamination of the Litani river). He highlights the negative impact that farming has when it fails to use uncontaminated water.

In view of these current threats, the population in Lebanon should observe basic hygienic prevention measures. People should avoid using tap water since the treatment carried out by the government may not be sufficient. Bottled water is a must but it should come from reliable sources. Washing fruits and vegetables is not sufficient; they should be soaked with water and vinegar. Thawing frozen meat and poultry under running water should also be avoided; leaving the frozen items in the refrigerator overnight is the best alternative. The use of sanitizers, in addition to detergents, to ensure food contact surfaces and utensils are not contaminated, is also recommended.

For Hassan, the problem is linked to the government and it cannot be resolved until there is a political will to do so. "I have to accept that damage may occur and may continue to occur until the problem is resolved," he states. However, a number of practical solutions could provide temporary storage for the waste that may contain heavy metals and prevent their contact with water. Unlike organic waste, heavy metals do not biodegrade, causing long-term pollution once they come into contact with water.

Wazne provides further temporary solutions to contain the damage. He advocates providing temporary storage locations away from natural springs and

shallow groundwater aquifers. Lastly, he lists storing waste at locations where the terrain is underpinned by clay strata that prevent the pollutants from leaching into natural aquifers.

The worst-case scenario, which is unfolding before our eyes, is the contamination of the groundwater. Reversing this process takes a long time. In addition, the common practice of burning of solid wastes leads to the release of toxic gases such as dioxins.

Wazne advises farmers not to irrigate their crops using waste-water because of the risk of pathogens and heavy metals getting into the food supply. He believes that a life cycle assessment might be the best scientific method to compare different treatment technologies. This method compares the carbon footprint left by the different waste treatment solutions.

Regardless of which engineering solution will be chosen, it will be essential for the constituencies to be involved socially and politically, to avoid the current situation from occurring again. Municipalities were caught ill prepared for this garbage crisis and had no contingency plans. The most pressing concern now is to act promptly. Wazne explains that there are solutions that could work but they must be put in place immediately. In his opinion the essential issue, if sanitary landfills are used, is that they are used properly, according to international standards. The main obstacle remains the political will to implement the least costly and most environmentally friendly solutions.









Applauding determination

By Reem Maghribi

LAU rewards students for scholarly contributions



"Awards are physical representations of hard work."

—Riman Jurdak, LAU Beirut campus activities associate manager

Recognition and awards are highly effective at motivating people to work harder and aim higher. Applauding students for their achievements in front of their peers adds to that motivation and spreads it further. This is the *raison d'être* of the various student awards granted every year at LAU.

Hundreds of students are publicly acknowledged at the annual commencement, Honor Society and club awards ceremonies that recognize academic excellence, leadership, dedication to others and strong community spirit.

"Awards are physical representations of hard work. Those with ambition and zeal will work hard regardless, but the awards offer an added incentive to push students even further," says Riman Jurdak, campus activities associate manager, who organizes the Beirut events at which students are honored.

The undergraduate students with the highest GPA at each school from each campus receive a monetary award of one thousand dollars and are invited to give a speech at the Honor Society ceremonies.

"We are gathered here for one minute to celebrate, but we are celebrating years of dedication, perseverance, resilience and diligent effort," said scholarship student Elias Keyrouz, the Beirut-based student who boasted the highest GPA at the School of Arts & Sciences at this spring's Honor Society ceremony. In defining the value of hard work, he added: "A life of excellence comes from making a contribution."

Four students deemed to have exhibited exemplary leadership and service to others are also saluted each year through the Riyad Nassar Leadership Award and the Rhoda Orme Award respectively. Nominated by their peers and LAU staff and faculty, one graduating student per school per campus receives the Torch Award for High Leadership and Service Spirit during the commencement ceremonies. The most recently established LAU student accolade is the Sara Khatib Inspiration Award, launched in 2014 following the death of the LAU student after whom it was named.

"Each award has its own identity and purpose, but ultimately they are all instruments to encourage students to work hard and show their inner talents and passion," explains Jurdak, who works closely with the hundreds of members of student clubs in Beirut, as does her counterpart Alan Kairouz in Byblos. Those students who show initiative and commitment to the university community through their work within student clubs are awarded medals at special ceremonies organized by the Office of the Dean of Students at each campus.

Fatima el-Ahmad, secretary of the newly formed Intersectional Feminism Club, was delighted to be among the recipients of medals at this year's club awards. "It means a lot. Starting out was very challenging, and the fact that our perseverance has been acknowledged is very satisfying."



Grooving to the beat

LAU showcases diversity in movement

"There's a completely different vibe this year," says LAU Assistant Professor of English and Dance Nadra Assaf at this year's International Dance Day Festival in Lebanon, hosted at LAU. "We have African Dance and Debke workshops in the schedule, whereas we've previously focused more on ballet, modern and contemporary."

Assaf, who boasts a Ph.D. in education, a maste'rs in dance and a dance school with three branches throughout the country, founded the annual festival in 2011. Her goal was to build a bridge between LAU's creative arts department and dancers in Lebanon. "I also wanted to provide dancers with an opportunity to strengthen their skills with experts in different genres," says Assaf.

Street dancer and 12th grader Melanie Antoun is grateful for the opportunity and the diversity. "This festival is very enriching, giving me the opportunity to try out various forms of dance. It's also wonderful to work with international trainers who focus on technique and not just choreography."

As it has every spring, the festival this year welcomed hundreds of dancers of all ages who joined various classes run by expert foreign and local instructors. Together they prepared for a spectacular gala performance held on the festival's closing night and presented in the main courtyard of the Byblos campus.

Campusyoles

For more details about these LAU activities, visit the news section of www.lau.edu.lb.

Academic Collaboration

Nutritionists and food scientists take over Irwin Hall

More than 700 students and practitioners in the fields of nutrition and food science gathered at LAU Beirut in April to listen to 19 specialists present their latest research findings. Students and professors from eight universities expounded on the rising obesity levels in the MENA region, the carcinogenic risks inherent in potato chips, gluten mislabeled products, the nutrition of Syrian refugees, and the risk of pesticide residues, among other topics. The presentations were delivered in three sessions, with the first focused on nutrition, the second on food science, and the third a combination of the two. "Nutrition and food science are very related," explained conference organizer and LAU Assistant Professor of Food Science and Technology Hussein Hassan. "After all, the food industry produces industrial products that are affecting the nutrition of individuals."





Mutual comprehension

A group of budding translators from both LAU and other Lebanese universities gathered in March for a symposium titled "Translation: A Process of Knowledge Construction." Hosted by LAU's B.A. in translation program, the event featured local and international experts who spoke about the role of translators in mediating between cultures, creating harmony, promoting peace, and developing new knowledge. "Translators construct content, cultural and linguistic knowledge that others would not otherwise have access to," said Assistant Professor of English and Applied Linguistics Nuwar Diab, director of the B.A. in translation. "In so doing, they promote cultural understanding and reduce prejudice," she added.



LAU makes the world vour second home

Over 30 universities, institutions and embassies from around the world gathered at LAU Byblos for International Education Week. The April event was dedicated to providing networking opportunities and information for students seeking to pursue further studies abroad. The opening ceremony inaugurated a series of events designed to benefit both students and staff members, ranging from sessions on international internships to world-class Ph.D.s and faculty-led study trips. "The time has come to put in place international education in practice, in a world that is so characterized by the culture of knowledge," said LAU President Joseph G. Jabbra speaking about LAU's commitment to internationalization.

A call to creativity

Not shying away from tough questions, this year's creative writing competition invited students from all disciplines to submit essays and short stories revolving around the theme "The Road to Happiness." The competition, which culminated with the distribution of awards in April, is one of several initiatives promoted by LAU to encourage creative writing. The previous weekend, a workshop was held to train students in different styles of writing. "These initiatives reflect LAU's desire to create — through its renewed English program — a generation of professional writers who can produce content geared toward different types of media," says English professor Jenine Abboushi. "The variety of writing exercises is expressly designed to unleash the students' capabilities." The event was also an occasion to remember the young poet Haas Mroue, who died of a heart attack in 2007. Thanks to his mother, Najwa Mounla, who donated the event's hosting fees, LAU students have the chance every year to experiment with writing and find their own voice.



Hot Topics



All about women

LAU students, faculty members and staff from different departments and units were involved in marking International Women's Day this year through several events organized from March 7 to March 10. Students from the Intersectional Feminist Club and the Social Work Club kicked it off by inviting migrant domestic workers to recount their hardships and voice their demands for better living conditions in Lebanon. "When we think about International Women's Day what comes to mind are white upper-class women, but this celebration was originally born in appreciation of the working class," says student Sarah Kaddoura, head of the feminist club. "LAU is a privileged platform and we should make it available to those who deserve it." The next day, the university's Institute for Women's Studies in the Arab World (IWSAW) hosted a discussion on the representation of women in municipal councils in collaboration with the National Commission for Lebanese Women. The event proved extremely popular, packing the Irwin Hall Auditorium on the Beirut campus with students, faculty and members of the broader community. IWSAW also collaborated with ESCWA to commemorate International Women's Day at the UN house in downtown Beirut. Pop star Ragheb Alama, actress Nadine el-Rassi, LAU Vice President for Student Development and Enrollment Management Elise Salem, United Nations Under-Secretary-General Rima Khalaf and songstress Faia Younan each took to the stage to share messages of hope and resistance.

To sketch or not to sketch

An enthusiastic audience filled a lecture hall at LAU Beirut in April as the School of Architecture and Design held a panel discussion about comics and censorship. Lebanese laws on freedom of speech and expression are ambiguous, with several cases over the past few years increasing public debate about the issue. These include the recent case of Samandal, a popular satirical Lebanese comic book series that addresses various social and political issues. In 2010, the publication's editors were sued by the Lebanese state for "inciting sectarian strife" and "denigrating religion." It was therefore fitting that Samandal cofounder Lena Merhej kicked off the event and later moderated the open discussion panel that included Charles Brownstein, a tenacious advocate for free speech and chair of the U.S.- based Banned Books Week Coalition, Irina Chiaburu, who earned her Ph.D. from Jacobs University (Bremen) and whose research focuses on censorship in the Soviet Union under the Brezhnev government, and Lebanese legal expert Rana Saghieh, who supported Samandal during their legal battle.





Earth Day concerns Lebanon

In April, LAU held a symposium titled "Earth Day Concerns Lebanon," which brought together LAU professors Christian Khalil, Mohamad al-Zein and Ahmad Kabbani and leading experts Ziad Abi Chaker, CEO of Cedars Environment, Shawki Srour of Dar al-Handasah and Walid Saad of the American University of Beirut. Kabbani, a professor of chemistry, organized the event with the aim of creating a channel between professionals with different emphases. "To solve the garbage crisis we need to break down the problem into its different components and tackle them separately," he said. "There is no such thing as one solution to a problem."

LAU strikes gold

"Where there's a will, there's a way, and now after years of hard work, the Captains have taken the gold," enthused LAU Byblos Athletics Director Joe Moujaes following the final varsity football match of the University Championships, which ended in a 1-0 victory for the LAU Captains, their first championship victory in the history of the Byblos campus.

"Men's football was always a challenge, as our students are not of a football culture, but after trying various strategies, we're delighted with the win," added Moujaes. Bank manager by day and Captains football coach by night, Alaa Diab took over responsibility for the varsity team at the beginning of this season. "Football is a team sport and so this win is a team achievement," he said, expressing his gratitude for the support of the administration, the players, the coaching assistants, and the team physiotherapist.



Community Engagement





Opening new opportunities for the betterment of society

"Civic engagement is not genetic. It must be repeated generation after generation. This is the basis of constitutional democracies." So said LAU President Joseph G. Jabbra to a room of LAU students, staff and faculty who came together with representatives of the civil society pressure group, Civic Influence Hub (CIH), to witness and celebrate the signing of an agreement between the two entities. "This historic moment will initiate a partnership of work, not just

talk," said CIH Councilor Fahd Saccal, who signed the agreement on behalf of the organization. The partnership, he explained, will include collaboration between CIH and the academic core of LAU on macro policy planning as well as engagement with students, through micro projects intended to stress the importance of civic involvement and social responsibility.

Pharmacy students serve the community

Thirty mothers, three fathers and no less than fifty Syrian children gathered with students from LAU's Pharm.D. program at the Makhzoumi Foundation center in Beirut in March to learn about where, how and why children should be vaccinated. "What illnesses can be prevented through vaccines?" asked Afif Brahim, a student of the School of Pharmacy's accredited graduate program who was at the center on an ambulatory care rotation. A number of parents in the audience, many of whom had attended a previous talk about family planning also given by LAU students as part of their rotation, raised their hands or shouted out illnesses. "With each talk we are building a stronger rapport with the community," explains Clinical Assistant Professor Ghada Khoury, who is responsible for the rotation that has included presentations and services delivered by students to beneficiaries of the Makhzoumi Foundation.



PÓWER

The spirit of service lives on

Representatives of Lebanese NGOs, as well as LAU students, faculty and staff gathered on the Beirut campus in April to celebrate their spirit of service at the first annual NGO symposium. The event was organized by the Outreach and Civic Engagement unit in collaboration with the Adnan Kassar School of Business to highlight the success of BUS299 course, a zero-credit mandatory course that promotes community engagement and which involves business students volunteering for a cause during a whole semester.

"1,480 LAU students were given the opportunity to intern at NGOs through the course," said Assistant Vice President for Outreach and Civic Engagement Elie Samia. Following the screening of students' testimonies of their experiences with the organizations they interned with, the NGO representatives received awards for galvanizing relief work at LAU and for their dedication to humanitarian concerns in Lebanon.

LAU dives in

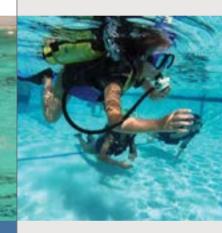
By Reem Maghribi

And comes up determined to do even better

During the spring season, a team of five swimmers returned from Eurovalentia, an international universities tournament, with a record-breaking fourteen medals. These included gold medals won by 2015 Athlete of the Year Mohamad Baghdadi in each of the seven races in which he participated.

Baghdadi's father Moustafa, Lebanese swimming champion between 1975 and 1980, has coached the Beirut-based swimmers for the past six years.

"Lebanon does not have a culture of competitive swimming. This makes it more difficult for potential champions to compete internationally," says the coach, echoing the frustrations of LAU's would-be Olympic swimmers, among them Maroun Waked.



Photos by Mohamad Mawas

"I came to LAU because of the swimming and the athletics scholarship they offered me. Not many Lebanese universities do that."

—LAU student Maroun Waked

Waked is studying civil engineering and, like Baghdadi, is trained by his father, Labib, coach to the swimmers based at the Byblos campus. "I came to LAU because of the swimming and the athletics scholarship they offered me. Not many Lebanese universities do that," says Waked.

The opportunity to combine study and swimming was also behind Joanne Skaff's decision to return to LAU for a second degree, this time in nutrition having already obtained her first in interior architecture. "I train every morning. LAU is one of the few universities where I can comfortably do that."

While LAU has boasted success at national and international swimming tournaments for decades, its participation in interuniversity water polo competitions is new. That's because LAU student Hesham el-Yafi only recently introduced the sport itself at university level.

After moving to Lebanon to study at LAU, Lebanese-Egyptian el-Yafi pursued

his love of water polo and established a university team that now competes against an AUB team – founded by his older brother – and another established at USJ. While the interuniversity tournaments in Lebanon are but a year old, the sport itself was among the first team sports introduced at the 1900 Olympic games.

"Advancement in water polo — as with most sports in Lebanon — is hindered by corruption and political difference," says el-Yafi, echoing Baghdadi's disappointment at the lack of advanced swimming pools and funding available to athletes. "There is passion here, but there is no consistency in the games due to a lack of resources."

One resource that isn't lacking in Lebanon is access to the open water. 225 km of coastline along Lebanon's western border provides a gateway to much of the water that covers 71 percent of the earth's surface. As such, scuba diving is an increasingly popular sport in Lebanon, and one practiced by LAU's Survival Team. The organization was founded by Campus Activities Associate Manager Alan Kairouz in 2011 and sees devoted students train in a variety of survival skills, including hiking, shelter building, climbing and diving. The team partakes in a variety of events and last year climbed Mount Kilimanjaro to raise funds for the engineering department's research into exoskeleton building.

Scuba diving has been included in the team's itinerary of activities over the years. "It is a great thrill to scuba dive, and the sport requires and enhances a multitude of skills, including navigation, planning, patience and control," explains Kairouz. "It also enables us to enjoy the beauty of the silence and grace of underwater creatures, as well as overcome many fears."

LAU students interested in exploring the beautiful sites, caves and wrecks beneath the sea while earning an Open Water License can join the Survival Team by contacting Kairouz at the Dean of Students Office in Byblos.



Faith in oneself

By Federica Marsi

A positive spirit in the face of adversity



"LAU is like a second family."

—Anthony Nahoul, computer science senior and recipient of the Sara Khatib Inspiration award





Like many other students at LAU, Anthony Nahoul juggles his time between studying and having fun with his peers at the beach or nightclubs. More than that, he has committed himself to his roles as president of the student council and treasurer of the Association for Computer Machinery (ACM) Club. Nahoul would be like any other spirited student at LAU, if it wasn't for the congenital amputation he was born with. His limbs — both legs and arms — began to form but never fully developed.

"When I was young I was trying to understand my condition, so I asked my dad whether my limbs would grow with time," recounts Nahoul. "He said no they won't, you will have to use your brains."

Nahoul took these words literally. Now a senior student in computer science, he aims to enroll for a master's degree at LAU and then find a job as a software developer. His condition ruled out enrolling in medicine or engineering, but did not prevent him from excelling in the field he finally chose. The 20 centimeters long part of the limb that did develop along his shoulder allows him to type on the computer, while practice and determination made him as fast as the other students.

There is little Nahoul can't do and he is determined to prove that. "Once I wanted to go karting," he says, referring to the high-powered vehicles used for racing. "The owner of the rental refused to allow me in, saying it was illogical for a physically challenged person to drive a race car. When I finally convinced him, everyone was startled to see how well I drove it."

His combatant spirit earned him this year's Sara Khatib Inspiration award,

a prize established by the family of the LAU fourth-year pharmacy student who died battling cancer in September 2014. The fund in her memory aims to support students who share her academic determination and reflect her positive spirit in the face of adversity.

"My message is that no matter how hard your life is, if you have faith in yourself and God you will manage to succeed," says Nahoul. "In the end, it is your personality that will leave a mark on people, not your physical appearance."

This is something he has learned throughout his life. When he was eleven, a group of kids gave him curious looks, reluctant on whether to approach him. "My dad told me not to blame them, because they were seeing something different than what I really was," says Nahoul. "He encouraged me to talk to them and, once they got to know me, we became friends."

Together with his loving family, LAU also committed to granting him the support he deserves, building a ramp and installing elevators in new buildings, as well as academic support. "LAU is like a second family," he says. "Whatever help they could give, both on the practical and psychological levels, they gave me."

Besides fully engaging in the LAU community as a student representative, Nahoul also finds the time to raise awareness on disabilities in schools and scout groups. "Once they interact with someone who is challenged, they understand that I am just like them," he says. "What is also important to me is to tell them that, no matter how hard their lives are, they should keep fighting."

A winning streak

By Reem Maghribi

LAU design students enjoy prestige and exposure of Dubai Lynx win





LAU students dominated at the Dubai Lynx awards this year, taking first and second place in the ceremony's du Student Integrated Award, making up over half those shortlisted and shining a spotlight on the university's Department of Design.

"Prestige and exposure, that's what the Lynx awards offer our students," says design instructor Joumana Ibrahim, explaining why she included a competition brief by the region's most prominent international advertising festival in her course material.

All nine students who completed the course in advertising design with Ibrahim during the fall season entered their work for consideration by the du Student Integrated Award Committee. Six were shortlisted and two took the top spots.

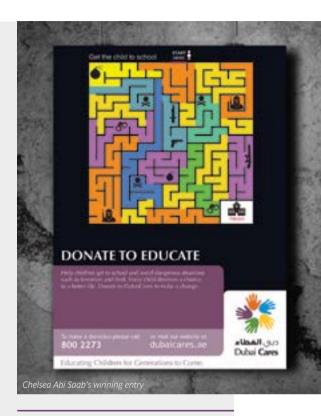
"They all produced great work," enthuses Ibrahim who, as part of the LAU course jury, had judged the work together with two creative directors from advertising agency Leo Burnett before the submissions were finalized and sent in to Lynx.

"Nadia's concept was easy to grasp and this is essential in advertising. Chelsea's boasted great illustration and art direction," says Ibrahim of the works by Nadia Khabbaz and Chelsea Abi Saab, which won second and first place respectively.

"I was very happy to win and have been motivated to apply to more competitions," says Abi Saab, who is graduating this year. "I encourage all students to apply. I thought focusing on schoolwork was more important, but this experience raised my self-confidence and traveling to Dubai to receive the award and attend the festival opened my eyes and expanded my horizons."

Also at the festival was graduating student Nour Itani, who had independently applied for the second of the festival's student competitions, the Masar Print Award. "I was immediately interested when I read the brief and had previously worked on a similar concept, so I reworked it and submitted it," explains Itani. Her poster about child abuse was shortlisted for the award.

Itani was invited to Dubai by the Leo Burnett Lynx academy, a program of workshops for students, which runs alongside the festival. "I was one of 21 students invited from across the region.



"We're delighted with the achievements of our students."

—Melissa Plourde Khoury, associate chair of LAU's Department of Design

We worked together on a campaign and it was such a learning experience. It gave me a glimpse into how the advertising industry actually works."

Associate Chair of the Design Department Melissa Plourde Khoury agrees that such exposure to the industry is invaluable to students. "It provides multiple advantages, including travel and exposure to industry players. This promotes multicultural thinking and can lead to job opportunities."

The overwhelming success of LAU students at this year's festival resulted in LAU being named the event's university of the year. Plourde Khoury accepted the award in Dubai on behalf of the university. "It was phenomenal. We're delighted with the achievements of our students. Their success and their ability to develop creative concepts, not simply visually oriented designs, is a reflection of our faculty's dedication and our program's mission."

Alumni update

January



Orientating New Students

Every year, the Alumni Relations Office participates in the New Students Orientation Program. This spring semester's program fell on Thursday, January 14, during which new students were presented with souvenirs and brochures introducing the association and explaining how it will benefit them after graduation.

February **•**

Desert Camp Experience

The Bahrain Chapter organized its annual desert camp on Tuesday, February 2, in an event during which more than 250 alumni and their families and friends enjoyed a day full of fun activities and games for all ages.



Keeping Safe

As part of its "Stay Aware" alumni lectures program, the Alumni Relations Office organized the first lecture for this academic year, titled "Safe Kids, Safe Families." On Saturday, February 20, at LAU's Beirut Campus, president of Kidproof MENA Darine el-Masri tackled the issues of abduction, predators and child safety.

Contemporary Art Tour

On Thursday, February 25, the BCW Chapter headed to Jal el-Dib to visit the new Aishti Foundation. More than 25 ladies who participated in the tour were able to enjoy the new design by architect David Adjaye, estimated to have cost over \$100 million.





Gala Dinner

Over 200 alumni and friends attended the Ghana Chapter's third Annual Gala Dinner, the theme of which was "Share the Love," on Saturday, February 13, at Labadi Beach Hotel in Accra. The event took place under the auspices of Lebanese Ambassador to Ghana Ali Halabi and in the presence of LAU President Joseph J. Jabbra.

March

Past & Present

Alumni and friends from the Toronto Chapter gathered for their annual dinner on Saturday, March 5, at Mazza Garden Restaurant in Ajax, Ontario. Chapter presidents past and present were there to join in the merriment and keep the conversation flowing.



Eighth Annual Ball

Meanwhile the younger Oman Chapter organized its eighth Annual Ball at the Grand Hyatt, Muscat on Friday, March 11. As usual both the attendance and the spirits were high.





Introduction 101

The Alumni Relations Office invited graduates residing in Qatar to a networking reception on the evening of Monday, March 7, at the Westin Hotel. More than 50 alumni mingled in an effort to revive the chapter and identify new committee members.



Desert Open Day

More than 600 alumni, families and friends enjoyed a day full of fun activities for adults and kids alike during the Kuwait Chapter's Annual Open Day on Friday, March 4.







Mothers' Day Brunch

The Beirut Chapter organized its Annual Brunch on Saturday, March 5, at Mandaloun Café in Achrafieh. The event gathered more than 100 alumni and friends who enjoyed a lovely time catching up on the latest news.



The Abu Dhabi Chapter celebrated its 23rd annual dinner at the Beach Rotana Hotel on Thursday, March 10, which also honored Abdallah Yabroudi. More than 400 alumni and friends took this opportunity to congratulate themselves on such a long run.





Members of the West Palm Beach, East Coast Florida Chapter came together for dinner at E. R. Bradley's Bar & Grill on Saturday, March 12, while in Tampa, West Coast Florida Chapter alumni gathered for lunch at Brio Tuscan Grille on Sunday, March 13. It was a great chance to network, catch up with old friends and make new ones as well.



Fun Night Out

The Dubai & Northern Emirates Chapter chose Music Hall at the Jumeirah Palm Island in Dubai as the venue for its annual dinner on Saturday, March 5, which honored Andy Khawaja (who received an honorary doctorate at this year's commencement ceremony). More than 600 alumni and friends enjoyed a great evening grooving to the music.

Alumni update

April



Getting to Know You

The Alumni Relations Office and the Offices of the Deans of Students (Career and Placement) organized the tenth Annual Alumni Business Networking Reception on Tuesday, April 12, at Villa Linda Sursock, Achrafieh. The event brought together more than 200 recent graduates and HR directors of key companies from Lebanon and Middle East to discuss market and employment issues in an informal setup. It was also an opportunity for university officials to receive feedback on the performance of LAU graduates in the market.

A Walk in The Woods

The BCW Chapter organized a half-day visit to Horsh Beirut on Saturday, April 23. More than 20 ladies strolled through the pine trees and admired the spring flowers that decorated the park.



Senior Student Orientation

The Alumni Relations Office organized its 14th "Senior Students Orientation Activity" on Wednesday, April 6 and 7 at the Byblos Campus and on Tuesday and Wednesday, April 13 and 14 at the Beirut Campus. The seniors were treated to refreshments and given leather business card holders with a brass plaque on which "LAU Alumni Association Class of 2016" had been engraved. They all provided the office with contact information so as to remain in touch even after graduation.

May



Family Day

The South Lebanon Chapter held their Annual Family Day Out at Salhiyeh, South Lebanon on Sunday, May 8.



On Wednesday, May 11, alumna Tania Shaheen Tayssoun and her husband Wissam hosted over 40 people to welcome LAU pharmacy students on rotation at the Houston Methodist Hospital. Among the guests were former BOT member Eva Farha, pharmacy students' mentor Dr. Ray Hachem, and Dr. Mike Liebl, who oversees them at the hospital.



Life Skills

As part of its "Keep Learning" alumni lectures program, the Alumni Relations Office organized the fourth lecture for this academic year, titled "Conflict Resolution: Quick Fix or Skills for Life?" On Friday, May 13, at the Beirut Campus, Makram Ouaiss, assistant professor of political science and international affairs at LAU, tackled the issue of conflict resolution as a way for two or more parties to find a peaceful solution to a disagreement among them.



Historic Sunday Brunch

The New York/New Jersey Chapter organized a special afternoon at the "Frying Pan" – an historic boat moored at Pier 66 in Manhattan on Sunday, May 15. Alumni and friends gathered for drinks and brunch and weathered a cool, windy NYC day on the Hudson River.





Talents come full circle

By Federica Marsi



Sixteen internationally acclaimed alumni come back to LAU to showcase their work

"We have a full-fledged office designed to promote our students."

—Abdallah el-Khal, executive director of the Alumni Relations Office Christine Kettaneh graduated from LAU in 2007. Since then, her career has skyrocketed, culminating in the prestigious Arte Laguna Prize (Venice 2015) for her sculpture *Beirute*. On the occasion of the Fine Arts Alumni Biennale 2016, she has come back — together with 15 other outstanding alumni — to the institution where she took her first steps as an artist.

The Fine Arts Alumni Biennale has become a yearly appointment for LAU alumni. Creating an occasion for them to interact and showcase their work is part of the university's pledge to support its students beyond their graduation day. "We have a full-fledged office designed to promote our students," says Abdallah el-Khal, the executive director of the Alumni Relations Office. "We take great pride in them and they deserve it."

Kettaneh's work, *Time Cutting Time*, was previously exhibited at Beirut's Art Center. For its realization, she personally collected metal fillings that key cutters would have otherwise thrown away and composed them on a vertical installation.

By lining up the bits that are lost when the key is cut, Kettaneh assembles the space where the essence of the key system lies. "It forms a sort of mute melody, it activates a unique code," she says. The missing part creates a space — but not an absence.

Alumna Dalia Baassiri also elaborates loss, but of a quite different nature. "Our house in Saida burned down in 2013," she says. "This led me to experiment with charcoal to recreate the texture of ashes." Her work, *The Painter*, is produced on a Led Plexi lightbox, which creates images that seem to drift into a magical realm.

"In my years at LAU, I experimented with

lots of different materials, which made me aware of a world of techniques and possibilities," says Baassiri, who graduated in 2003. While she is a graphic designer by profession, she holds dear her activity as an artist. "My professors saw I was talented in drawing and encouraged me to go back to my essence," she says. "I often remember their words and still follow their advice nowadays."

Among the most striking success stories is LAU alumna Marya Kazoun, who has been featured many times at the Venice Biennale and is represented in Beirut by Galerie Janine Rubeiz. Although she works between New York and Venice, she returned to Lebanon to give an inspiring Artist Talk, which opened LAU's Biennale exhibition on March 22.

"You are lucky," she said to the students attending the event. "You have great teachers." Her years at LAU have taught her how to transform the thoughts and feelings she was so desperate to express into works of art. Her installations — created by sewing together all kinds of material and giving it life, at times, through the use of actors — features an alternative vision of the world that often reflects her own subconscious fears.

"At LAU, I learned how to express myself and take out what I have inside me," says Kazoun. "You could say I was freed."

The 16 artists were Randa Abdel Baki, Philippe Aractingi, Dalia Baassiri, Wissam Beydoun, Lana Charara, Usra el-Madhoun, Doreen el-Zein, Tuline Hammoud, Mona Jabbour, Christine Kettaneh, Ilat Knayzeh, Mireille Merhej, Alia Noueihed Nohra, Liane Mathes Rabbath, Louma Rabah and Yasmine Taan.

Staying connected

Lina Gress (B.A. '60) obtained her M.A. in psychology from the University of Jordan in 1983. Lina is currently living in Amman, after retiring from a distinguished career with Jordan Television and Arab Radio & Television (ART). She now works independently as a media consultant and in satellite coverage of sports and events.

Arminée Choukassizian (B.A. '61) obtained her M.A. in English literature from AUB and her M. Phil. in Anglo-Irish literature from Queen Mary College, University of London. A retired academic, Arminée lives in Beirut and recently saw the publication of her first collection of poems, which includes 42 poems in English and 10 in French, and a short story of hers — titled *Myra*.

Rola Kobeissi (B.A. '66) obtained her postgraduate degree from the Université d'Avignon in France before returning to Lebanon, where she works as a freelance cultural manager. Rola is married with two children and lives in Beirut.

Wafa'a Housseini Onyalla (B.A. '84) lives in Juba, South Sudan, where she is the dean of the Fine Arts and Industrial Design School at the University of Juba. Now a South Sudanese national, Wafa'a has had her artwork exhibited in Lebanon and abroad, including at UNESCO Juba. She has also worked as a teacher and children's illustrator. Wafa'a is married to archaeologist Youssef Fulgensio Onyalla, the director general of South Sudan's National Archive.

Selim Oud (B.S. '87) lives in Beirut, where he is the head of navigation at Middle East Airlines. Selim is married with three children, two daughters and a son.

Nada Lutfi (B.S. '90) obtained her postgraduate degree from AUB in 1995 and went on to obtain a Ph.D. in genetics online from Leicester University in the U.K. in 2014. Nada moved to England in 2009, where she is an administrator and teacher at a private agency for tuition in the sciences for school and university students. While she became a British citizen in 2014, Nada has also proudly kept her Lebanese nationality. She is married to Chris Baker.



















Samir Gharzeddine (B.S. '93) obtained his postgraduate degree in computer information systems online from the James Adam University. Samir moved to Jeddah, Kingdom of Saudi Arabia, where he is an IT general manager. He is married to Rana Khishen with whom he has two girls (Celine and Cybelle) and twin boys (Ryan and Ralph).

Having worked at Ericsson, Siemens and Ogero, **Joseph Jwan (B.S. '94)** is now the sales manager for T. Gargour & Fils (Mercedes-Benz Lebanon) in Beirut. He lives in the seaside town of Tabarja.

Tarek Ayass (B.S. '93, M.S. '95) obtained his D.B.A. in 2008 from the University of Phoenix in the U.S. Tarek resides in Dubai and has recently joined Thomson Reuters as director for partnerships and alliances for the Middle East and North Africa. He took with him 21 years of regional sales and channel partnership management

experience serving multinational companies, including NCR Corporation, Sun Microsystems and GE. Tarek and his wife Ola Shakhshir (B.S. '00) have two children, Raneem, age 14, and Kareem, age 12.

In 2008, **Abeer Khiami (A.A.S. '97)** quit her job as an art director and started her journey with alternative medicine. Along the way, she obtained Integrated Clinical Hypnotherapy certification from the California Institute of Hypnosis in India. Abeer moved to the UAE, where she works as a mental coach and is enjoying married life without children.

Omar Hamade (B.S. '95, M.B.A. '98) obtained his C.P.A. from Concordia University, Montreal and his C.B.V. from Toronto York University. Omar currently lives in Montreal, where he is a chartered business valuator.























System Offerings and Agreements as part of her study of IT infrastructure library and service management. That same year, she also took her certification in Train the Trainer and became a certified trainer affiliate. She is married and has two girls, Sedra (age nine) and Talid (age seven). For Malda, "the family is the investment one makes to render the most precious profit and value of all time."

Richard Hanna (B.E. '00) is an entrepreneur who lives in Lebanon. One of his latest projects with partner Jules Khoury **(B.E. '01)** has been to provide the state with advanced velocity machines that are capable of repairing road faults quickly, efficiently and accurately, at a low cost and with excellent quality. Richard is married and has two children.

Raed Mhanna (B.S. '00) moved to Doha, Qatar, where he is a financial and business consultant. Raed is a certified management accountant, internal auditor and fraud examiner. He has also earned his Claritas Investment Certificate from the CFA Institute and is certified in International Financial Reporting from the ACCA. Raed is married and has two daughters.

Jihad Nehme (B.E. '01) had completed all the main courses in the M.B.A.

program at LAU before moving to Riyadh, Saudi Arabia, where he is now the head of Cloud Services Business Unit at Edarat Group. He was previously IT manager at Sanita, ERP project manager at Sakr Power Systems and head of the Project Management Office and of Operations at Edarat Group.

Bilal Arnaout (B.S. '02) lives in Beirut, where he is cluster deputy general manager at the Lancaster chain. He was previously operations manager at the Four Points by Sheraton Le Verdun. Bilal is married to Zeina Zein (B.A. '03, M.A. '09), with whom he has two daughters, Yara (age six) and Aya (age three).

Adnan Bizri (B.S. '02) obtained his postgraduate degree from George Washington University, U.S. Living in Washington, D.C., Adnan is an investment valuation specialist. He holds the CFA designation and CPA license in the states of Virginia and Delaware and performs valuation of various asset classes captured in pension funds.

Nadine Khalifeh (B.S. '01, Pharm.D.'02) lives in Lebanon, where she is a key account manager at a medical company. Nadine is married and has girl (age 12) and a boy (age eight).

Charles Abi Chedid (B.E. '99) moved to Qatar, where he is the head of the engineering section at al-Darwish Company.

Shirine Osseiran (B.A. '99) obtained her postgraduate degree from the Chelsea College of Art and Design and Kingston University, London. Shirine currently lives in London where she is a visual artist. She has been selected among 40 international artists to design the ancient Egyptian symbol of the Ankh, as part of *The Key*, a major East-West peace- building art exhibition in Egypt, London and New York. The exhibit delivers a message of hope for a harmonious, peaceful and tolerant world.

Malda Tabbah (B.S. '94, M.S '99) lives in Beirut, where she is the head of the Project and Program Management unit at al-Mawarid Bank. PMP certified, in 2015 Malda took her certification in ITIL

Staying connected

Rania Temraoui (M.B.A. '02) lives in Beirut, where she is a finance manager at World Learning. Rania also provides training for local NGOs on labor laws, financial management, procurement, and budgeting and internal control, among other skill sets.

Carol Allam (B.S. '03) lives in Lebanon, where she is the principal at City Modern School (CMS). She previously taught at Saint Mary's Orthodox College (SMOC), al-Ittihad and Abu Dhabi International Private School. Carol says she has no time for anything other than family and work, for her school is basically her other home

Serge Andezian (M.B.A. '04 obtained his Certified Information Systems Auditor (CISA) certification from ISACA and his LCPA from the Lebanese Association of Certified Public Accountants (LACPA). Serge lives in Lebanon, where he is head of overseas activity and internal audit at Bank of Beirut.

Rana Bissat (B.A. '04) is currently pursuing a master's degree in art from Beirut's Academic University for Non Violence and Human Rights and is expected to graduate in 2017. Rana lives in Beirut, where she also works as a freelance graphic painter, sculptor and illustrator. Among her other endeavors, she designed an academic sword for professor Christian Robin, 40ème Immortel à l'Académie Francaise-Université de la Sorbonne-Paris-France-2007.

Niam Etany (B.A. '00, M.A. '05) obtained her M.F.A. in screenwriting from Hollins University, Virginia, U.S. Niam lives in the Puerto Rico, where she is a filmmaker and storyteller. She has just completed her first feature film, a documentary titled *Twice upon a Time* under the banner of her company, Placeless Films, managed by Lara Abu Saifan (B.A. '98) and Niam.

Abdallah Kabbara (B.Arch. '05) obtained his M.B.A. from the University of Balamand. Abdallah lives in the Kingdom of Saudi Arabia, where he is a construction manager at Leman for Project Management. He was previously senior architect and design manager at Projacs International.

Samer Tay Bou Dargham (B.S. '06) obtained his postgraduate degree from the Maastricht School of Management. Samer now lives in Doha, Qatar, where he is a sales manager at Jaguar and Land Rover. He is married with a two-year-old boy and expecting a baby in September 2016.

Rafic Maknieh (B.S. '06) currently works in the laboratory department of Clemenceau Medical Center and as assistant manager of his father's pharmacy. Rafic lives in Beirut and is engaged to Sahar al-Khodor.

Georges Rehayem (B.E. '06) obtained his postgraduate degree from the Grenoble Graduate School of Business in France. He currently lives in Qatar, where he is market manager of British American Tobacco.

Samia Qumri (B.S. '00, M.A. '07) lives in Jordan, where she is an emergency youth officer with UNICEF. Samia has over 10 years extensive experience as a researcher on refugee issues and migration focusing on Jordan. She has also worked with UNHCR-Jordan on the response to the Syrian crisis, both in urban settings and refugee camps.

Carole Sabbagha (B.S. '07) lives in Doha, where she is the marketing manager for Place Vendôme Qatar. She was previously marketing manager for Landmark and Villaggio Malls, also in Qatar.

Bayat Bayat (B.S. '08) moved to Riyadh in November 2015 as a finance manager for GDLS-CSL. He was previously a treasury analyst at the Rotana Media Group. Bayat is married and has a three-year-old daughter.

Ahmad el-Harake (B.E. '08) lives in Lebanon, where he is a project manager at Caterpillar. He previously worked in Chad, Africa, with the UNDP.

Patrick Rahal (B.S. '03) obtained his postgraduate degree from the ESCP-EAP in Paris in 2007. Patrick is married and currently lives in Qatar, where he works as a fund manager. He is an award- winning fund manager with more than 10 years of experience in trading equities, bonds and derivatives.

Atallah al-Salim (B.S. '09) lives in Beirut, where he works as an independent researcher and consultant. He has published two books in three years.

Wissam Mansour (M.B.A. '09) lives in Riyadh, Kingdom of Saudi Arabia, where he is the facility director for Princess Nourah University, Dar al-Handasah. He was previously the director of Physical Plant at LAU, Byblos.

Rowaida Zahreddine (B.A. '07, T.D. '09) worked in the Kingdom of Saudi Arabia and is now working as an English teacher in Lebanon. Rowaida is looking forward to returning to LAU in the fall of 2016 to pursue her master's degree. She is married and has a son and daughter.

Said Abou Kharroub (B.S. '10) lives in Lebanon, where he works as an information management officer at the United Nations Office for the Coordination of Humanitarian Affairs (UNOCHA).

Youssef Chatila (B.S. '10) lives in Dubai, where he works in acquisitions for O3 production — a subsidiary of the MBC Group — negotiating for Turkish TV series and movies, as well as Korean dramas.

Fadi Assaad (B.S. '11) obtained his postgraduate degree from London Metropolitan University in the U.K. and is now pursuing his M.B.A. at LAU. Fadi has his own business specializing in children's entertainment and events. He is also a marketing and communication executive at Unigaz.

Youssef Chamas (B.S. '11, M.B.A. '14) obtained his M.B.A. from LAU. Youssef currently lives in Dallas, where he works at Fidelity Investments. He was recently promoted from the cost basis analyst department to the portfolio advisory services department, and says that he is married to his career.

Hussein Mohsen (B.S. '11) obtained his M.S. in bioinformatics from Indiana University in the U.S. He currently lives in San Mateo, California, where he works as a research engineer at Lattice Engines Inc., a machine-learning firm in the Silicon Valley. In September 2016, Hussein will be joining Yale University as a computational

biology and bioinformatics Ph.D. candidate.

Lamar Choucair (M.A. '12) lives in Lebanon and is a fulltime mom to daughter Yasmina. Previously she worked as a KG coordinator.

Karim Farhat (B.S. '12) is currently pursuing his master's in international marketing at London's HULT International Business School in the U.K. He is also on the HULT Varsity Football team. After working at Aramex and while working for Stars Innovation, he started his own shirt printing and vinyl wrapping company, but decided to put everything on hold to pursue a better career in the U.K.

Charbel Fersan (B.E. '12) lives in Lebanon, where he is a presales engineer at BMB. In his spare time Charbel is a freelance photographer.

Rouba el-Feghaly (B.S. '13) obtained her postgraduate degree from the Université Saint Joseph de Beyrouth. Rouba lives in Lebanon, where she is chief pharmacist and owner of Pharmacy Feghaly in Brazilia, Baabda.

Ilat Knayzeh (B.S. '13) is a painter, art director and assistant director of films, video-clips, ads, and so forth. She lives in Beirut but travels regularly for projects.

Michael Bayeh (B.S. '14) obtained his M.S. in healthcare administration from Suffolk University in Boston, where he now lives and works as a performance and quality improvement intern of ambulatory services at Brigham and Women's Hospital.

Nicolas el-Haber (M.S.E. '14) lives in Rome, where he is currently pursuing his Ph.D. in industrial production engineering at Università di Roma - La Sapienza, Italy. He previously worked as an electrical engineer at Earth Technologies in Lebanon.

Mohamad Sakr (B.S. '14) moved to Abu Dhabi, where he works as a product specialist at the Gulf Medical Company. He previously worked for six months as a teller at Banque Misr Liban.

Jad Abdo (B.E. '15) lives in the Kingdom of Saudi Arabia, where he works as a mechanical piping site engineer at CCC.

Torch Leadership Award recipient **Gaelle Fahd (B.Arch. '15)** lives in Lebanon, where she is an architect with a development and interior development company that has experience in Lebanon and the UAE. She had previously launched her own print house business, Right Angle, to serve as a platform for architecture students, architects and designers. Gaelle also gives her time to the Lebanese Architecture Club, a non-profit organization that helps architecture students expand their network and architectural skills through workshops.

Sarah Nazhet Mamlouk (B.A. '15) moved to Paris to live with her husband. Sarah is learning French and has applied to the American School of Paris and the International School of Paris to work there as a teacher



WHY I GIVE BACK

Diana Domain Abdo

(B.A. '76)





Diana Domain Abdo enrolled as a freshman at LAU (then BCW) in 1961, where she studied English literature and drama. Domain Abdo served as member of the student council, on the committee of the College Tribune, and as an usher with the Beirut Orpheus Choir. After living in the U.S., Greece and Dubai, she and her family now reside in Toronto, Canada, where she enjoys oil painting, cooking, singing in her church choir and volunteering at her local hospital. She recently started a knitting group in which members knit baby blankets and shawls for local shelters.

You enrolled at LAU when it was BCW and graduated after it had become BUC. Can you tell us how this happened?

In 1964, my studies were interrupted because I got married and moved to the U.S. with my husband Teddy Abdo. We returned in 1965 and one year later our son Nadim was born, followed by our daughter Rudayna in 1968. When our children started going to school, I decided to complete my education at BUC. It was elating to have my children attend my graduation.

What is your fondest memory of LAU?

I loved my days at the college. I was Ismene in *Antigone* and also produced *Little Red Riding Hood* and the comedy *Charlie's Aunt*. I loved the campus. It is really impressive. I have fond memories of my professors and deeply appreciate that they were always present and available, not only to teach us but also to help us through our times of need and stress. My professors made my university years both fulfilling and enjoyable.

What was so special about LAU then?

The classes were informative, rich in interaction and so much fun. My teachers were personable and sincere. I would specifically like to mention Irene Faffler, who as my mentor had a huge impact on me. The college helped me grow, mature and develop into the person I am now. I made amazing friends and met wonderful people.

Why do you give back to LAU?

LAU made my life richer and showed me how to make a difference. I would like to open doors for others and help them achieve their goals through a college education.

What would you like to see LAU achieve?

I would like to see LAU continue in its noble mission of creating more opportunities for those who want to pursue higher education, particularly for women. Women bring emotional intelligence to the workplace that men don't always have.

What message would you like to convey to your fellow alumni or to current students?

I would like them to follow their dreams, challenge their abilities and honor hard work through a high regard for honesty and integrity. Love what you do and you will excel at it.





For the past several years, Joe Abi Ghosn (B.S. '01) has been making substantial donations to support LAU's Gala Dinner Endowment Scholarship Fund as well as initiatives that he is passionate about, such as the university's groundbreaking exoskeleton project.

Abi Ghosn knows first-hand the value of a university degree. He is committed to helping students gain an excellent education that enables them to contribute to society and the betterment of Lebanon. As founder and CEO of Abi Ghosn Holding, he attributes much of his career success to the knowledge he acquired at LAU, where he earned a bachelor's degree in business management in 2001.

After launching the holding company more than two decades ago, he has seen it evolve from a small business to a large firm comprised of several entities, including ENJM Gas Stations and Cronus, a dorm complex purposefully located near LAU's Byblos campus. Abi Ghosn enjoys keeping busy and expanding his businesses. He is currently working on developing a 50,000 square meter resort in Laklouk, Lebanon.

Abi Ghosn is fulfilling his goals of bettering society and reducing unemployment in Lebanon, and through his support of LAU he is also fulfilling the important promise of academic excellence.



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