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Fr	Ac-Lr	Rf	Db	Sg	Bh	Hs	Mt	Ds	Rg	Cn	Uut	Fl	Uup	Lv	Uus	Uuo	



Our lives are dedicated to yours

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# Ra

## Radioactive

Volume 2. Issue no. 2. August, 2015

La	Ce	Pr	Nd	Pm	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu
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## VACCINES: A SOURCE OF MENACE OR A SOURCE OF HEALTH?

Sara Moufarij, Med II

There is controversy behind any manmade innovation. But who would have thought that a medically sound, or rather, medically mandated item like a vaccine would cause such a stir in both Europe and, more loudly, in the United States? (Continued on page 7)

## INTERVIEW WITH DR. RALPH COREY OF DUKE UNIVERSITY

In March 2015, AUBMC was honored to host Dr. Ralph Gordon Corey of Duke University, a world leader in infectious diseases, global health and medical education, and a long-time friend of our institution. During his visit, Dr. Corey met with institutional leaders such as President Peter Dorman, AUBMC faculty, residents, and medical students through a number of activities organized by the Department of Internal Medicine. Dr. Corey also gave a presentation on "Staphylococcus aureus Bacteremia and Endocarditis" through the Medical Grand Rounds at AUB. Furthermore, Dr. Corey rounded with Infectious Disease service at AUBMC, partook in the residents' morning reports, and interacted with students during their afternoon round on 5-South. The residents and students also had a chance to benefit from his knowledge and expertise in the field of infectious diseases and medicine at large. We had the chance to conduct an interview with Dr. Corey.

(Read more on page 11)

## OUT LOUD

How does AMALOUNA help raise public awareness on cancer?



“ Knowledge is power, and AMALOUNA aims to empower the public and specifically the new generation with the precise knowledge of cancer, cancer research, its importance, as well as its obstacles. ”

*Dr. Rihab Nasr, Associate Professor*



“ With research, a cure for cancer is possible! By encouraging youth to pursue research and raising national awareness of scientific endeavors in this field, we can be a stronger force against the disease. That is why I joined AMALOUNA! ”

*Zeina Azrak, MSc*

## AMALOUNA (أملنا): “WHEN THERE IS RESEARCH, THERE IS HOPE.”

*Zaynab Jaber, MSc & Farah J. Nassar, PhD candidate*

Cancer research has become one of the largest and most rapidly developing areas in the biomedical sciences. Investment in cancer research during the last decades has made significant contributions to help cure the disease that has plagued humanity for thousands of years. These discoveries have led to improvements in cancer prevention, diagnosis, treatment, and patients' survival rates. For instance, the five-year survival rates for all types of childhood leukemia rose from 48% to 83% between 1975 and 2010 (American Cancer Society).

Although cancer researchers in Lebanon have the knowledge and skills required to significantly contribute to cancer research, they face a major challenge: the lack of adequate resources. The Lebanese government, supported by several universities, dedicates minimal funds to this much needed research. External funding also remains difficult to obtain since Lebanon is not always considered within the zone of countries that qualify for financial aid (World Bank Classification). Additionally, many members of our Lebanese community lack a clear understanding of what causes cancer, its prevention or treatment, and how researchers develop evidence-based cures. Moreover, another obstacle faced by research is the lack of awareness of both school-age students and the community at large who do not acknowledge research as a career path as they are unaware of its potential as a job in Lebanon.

The importance of raising nationwide awareness about cancer research led to the establishment of AMALOUNA (أملنا), an American University of Beirut-affiliated educational organization that promotes research as humanity's best defense against cancer and highlights the importance of investing in scientific research to explain and understand cancer at the molecular and biological level. AMALOUNA was pioneered by Dr. Rihab Nasr, an associate professor in the Department of Anatomy, Cell Biology, and Physiology, Faculty of Medicine at AUB in March 2014. Her vision is gaining traction both on and off AUB campus. Currently, the organization not only includes AUB students (undergraduates, Masters, PhDs) of different majors and backgrounds, but also people of diverse vocations.

To date, AMALOUNA has successfully participated in the Women's Race organized in May 2014 and in the Beirut Marathon 2014. Additionally, a series of cancer research awareness lectures have been launched for high school students and the community. AMALOUNA also encouraged young researchers to commit to the cause by awarding \$500 prize to the most outstanding cancer research poster at AUB's Biomedical Research that took place in February 2015. As long-term goals, AMALOUNA aims to organize fundraising events to support cancer research in Lebanon and launch a program that promotes science and research in secondary schools by exposing students to the research community at an early stage.



Being part of AMALOUNA makes us aspire for a healthier future with the help of a community that embraces and appreciates cancer research. We would not be on our current path of revolutionizing cancer therapy if not for the extraordinary endeavors of individuals working in numerous research disciplines and technologies. We hope that one day, cancer research will become a national priority.

Follow us on Facebook: [www.facebook.com/AmalounaAUB](http://www.facebook.com/AmalounaAUB) and look us up on [kickstarter.com](http://kickstarter.com) to see how you can be more involved in our cause.

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## WHY DOES RESEARCH IN LEBANON YIELD LESS PUBLICATIONS THAN RESEARCH ABROAD?

*Patrick Aouad, MSc candidate & Zaynab Jaber, MSc*

It is undeniable that research in Lebanon has been advancing over the last few years, contributing to significant improvements in the fields of science and industry. Unfortunately, this is where the story ends. If we were to evaluate where major breakthroughs and discoveries take place, it shouldn't come as a surprise that big things apparently happen abroad.

Ultimately, for research to be of value, it needs to be made available to all, including the public, through publication. In fact, publishing figures are often used as a measure of productivity and a criterion for career advancement. The tendency for Lebanese scientists to publish in mainstream journals has been increasing (around 450 per year) according to international database indexes such as SCI and PASCAL. However, most of scientific writings remain locally or regionally published making them less visible and less likely to be picked up by the media and the general public.

Lebanon's current average of publication output is similar to that of Iran and Morocco in the mid-1990s and that of Tunisia and Algeria just a few years back (ESTIME 2007). Lebanon was lagging behind Jordan in the late 1980s and early 1990s but regained the lead in 2004. Iran currently produces more than 4,000 publications a year and has become a major scientific power in the region (SCI). The trend among countries in the region shows that increased political and financial support allows for competition and advancement in the scientific sector and builds wealth and economic development for these particular countries, allowing for continued support to research and development.

Without surprise, the top producer (52% of the number of publications) and the renowned of the Lebanese institutions is AUB. Being the oldest university in Lebanon, AUB has always championed the idea that good teaching and advanced research go hand in hand. AUB has the highest research budget in Lebanon and the best-organized institutional mechanisms to assist the AUB community with research projects sponsored through various funding sources. AUB encourages newly appointed faculty members to join its research fields, providing them with spacious labs and the opportunity to seed research grants. What distinguishes AUB from other universities is the coadunation of a "publish or perish" culture that promotes high expectations for publication quantity and quality in order for a faculty member to seek promotion.

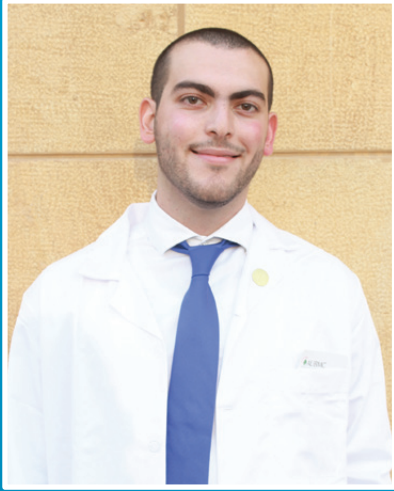
Lebanon should continue to increase the rate of growth in its publication by strengthening its mobilization and better structuring its research potential as well as by sustaining and renewing its national policy buttressed by adequate financial support. Unfortunately, figures from the World Bank and the National Council for Scientific Research show that Lebanon spends 0.2% of its GDP on scientific research. This lack of financial support is a major setback which prevents our progress towards establishing labs and state-of-the-art resources to conduct research and generate high throughput data.

Consequently, Lebanese researchers are often faced with the challenge of funding potential projects, which is why they spend most of their time writing grants—a time and effort-demanding task that can extend up to months. Moreover, even an item ordered online takes on average 3 to 6 weeks to arrive to Lebanon and can be quite expensive due to the shipment costs. In the United States, scientists expect the arrival of the same item within days. This indeed has a tremendous impact on the continuity of a research project.

Lebanon has its share of brilliant and capable scientists but faces a severe brain drain as individuals seek better opportunities elsewhere in the world. To reverse this situation, we need to invest in the mind power of our citizens in order to attain progress and maintain advancement in our society. AUBMC has already taken the initiative to recruit many Lebanese physicians with research experience, amongst which 135 are from top institutions in the US, back to their alma mater to participate efficiently in the prominent role research plays in the AUBMC 2020 vision and its investments in renovating research facilities and supporting research programs and initiatives.

## OUT LOUD

What can be done to help avoid student burnout?



“ I basically try to make the most of our P/F system, which was implemented as part of the Impact curriculum; I spare some time for sports, playing music, and traveling whenever I get a chance...”

*Joseph Cheaib, Med III*



“ For me, it’s sports, sports, and then some more. ”

*Mohamad Issa, Med III*

## INSIGHT INTO BURNOUT

*Amer Bechnak, Med III*

It is an accepted convention that a nation’s health depends on the healthcare professionals who deliver it. As health has progressed to become a profession for the select few, and as larger proportions of the population live longer (and hence get sick more often), the supply-demand chain has become awfully skewed. In conjunction with the ever-expanding bank of medical knowledge and the need to continuously stay well informed, caregivers are often exhausted and overworked. Among those, it is residents and medical students who are affected by burnout the most.

Outwardly, the causes of burnout might appear very obvious: among the countless hours of studying, looming stress from local and licensing examinations, and the fierce résumé-building attitude, it is easy for the medical student to lose sight of the big picture and the purpose for embarking on this noble journey. Moreover, we live in a country full of uncertainties, and that adds considerable stress to Lebanese medical students. When trying to track down reasons that could explain any dysfunction, we realize that one of the main culprits is the medical education system and the way it shapes its students. The vast majority of students enter medical school with empathy and compassion in their hearts, and it is those students who seem to suffer the most. They begin to realize that in the “real” medical school, grades are glorified, competition is celebrated, and the race boils down to how many mnemonics they can transiently hold in their weary memory. They take it personally, feeling that their dreams and aspirations of being a doctor have failed them, and start to question whether they wanted to join medical school in the first place.

Several medical curricula, such as those newly implemented at Harvard Medical School, Yale School of Medicine, NYU Medical School, UCSF Medical School, and the IMPACT curriculum at AUBMC have taken note of the matter and are rebuilding their syllabi from the ground up. At AUBMC for example, arts, history, and spirituality are blended into a new pass-fail curriculum that places very little weight on grades, focusing rather on educating the whole student. In a recent class survey administered to second year medical students, only 1% of students were found to suffer from burnout, a number that many medical institutions have yet to contend with.

In a recent research study conducted by Dr. Farid Talih, a Sleep Disorders and Substance Use specialist at AUBMC, on burnout among AUBMC residents, a positive correlation between depression (which may be exacerbated by personal life stressors) and burnout was found among the medical staff. In addition, while the study found no differences in levels of burnout between males and females or among different medical specialties, it did show that the use of illicit substances is a powerful risk factor for the development of burnout.

When addressing the findings, Dr. Talih advises residents to “have a reliable support system, take care of {their} mental health, avoid negative coping skills (such as drugs), and lead a healthy lifestyle.” Dr. Talih further said to “Find balance in your life and always take time to do the things you like.”

Ultimately, it is the duty of the healthcare institution to prevent burnout among its members. At AUBMC, health care providers are encouraged to use the University Health Services to address all their concerns. As such, AUBMC reinforces the notion that physicians are just like those to whom they provide care, and that burnout is an interceptable and preventable nuisance in the delivery of care in a challenging medical environment.

# LEBANESE FOOD SCANDAL: DO YOU KNOW WHAT YOU'RE EATING?

Tala El Tal, Med IV

"What do you feel like ordering?" your friend asks you around lunchtime. Suddenly, you remember "the list" released by the Minister of Public Health, Wael Abu Faour, as part of the 20-day inspection campaign. This list exposed multiple popular restaurant chains, supermarkets, and bakeries that have been violating basic food safety standards. Shockingly, among the places named are some of the supposedly posh restaurants and supermarkets in Lebanon.

The main aim of the campaign was to ensure the safety of Lebanese citizens and reinforce the importance of monitoring food. The campaign, carried out by the Ministry of Public Health's food safety inspectors, investigated over 1000 establishments across Lebanon, covering areas like Jbeil, Nabatieh, Kesrouan, Tripoli, Aley, Baabda, Chouf and more. The inspectors evaluated the compliance of food establishments with food safety protocols as well as whether or not the legal certification is in order. In addition, numerous samples of meat, chicken, frozen foods and dairy products were sent to the labs of the Lebanese Agricultural Research Institute (LARI) and of American University of Beirut, to accommodate for the large number of samples. Many of the samples tested positive for Salmonella, E.coli and Campylobacter. The food safety test results were then submitted to the financial public prosecutor for consideration and appropriate legal and judicial measures. These measures range from giving violators warnings or fines to even shutting down their institutions. So far, several slaughterhouses and unlicensed food establishments have been shut down, which is a significant step since one of the core issues concerning contaminated food lies within main distributors including slaughterhouses and chicken farms.

Many questions have been raised about this campaign: Why now? How severe were the violations that the Minister of Public Health vaguely brushed over? How accurate were the samples? What steps are essential to enforce further quality control? The answer to the latter question lies in the outcomes accomplished since the campaign. Primarily, the Parliament's Joint Commission approved a new food safety draft law in January 2015, which was created by a special parliamentary committee of ministers. The draft law, based on the previous food safety proposal by the late Minister Bassel Fuleihan in 2002, aims to reform the way the government handles food safety matters to ameliorate better communication among the different ministries. For the Lebanese proposal to become a full-fledged law, it should be discussed in the Parliament's General Assembly and subsequently referred to the Cabinet responsible for establishing the framework of its actual application.

The draft law covers a wide range of topics from the role of the Food Safety Lebanese Commission (FSLC) to possible sanctions for contaminated food products. The FSLC consists of seven members of food safety experts who will issue rules and probe into all stages of food safety from importing and exporting to packaging, storing, farming and more. Any contaminated local or imported foods will be detained and necessary judicial measures will be taken accordingly. The health minister is also pushing for establishing a specialized health court that only deals with cases violating food safety protocol. The FSLC can even use media platforms to alert the public about dangerous food products. In addition, duties of farmers including monitoring pesticides, utilizing compost and medicines, and supplying animal feeds were outlined. Moreover, the draft law elaborated on the importance of food packaging in regards to the sanitary conditions, nutritional characteristics and warnings about possible food allergies. At the labor level, the Minister of Industry, Hussein Hajj Hassan along with the Lebanese standards institution (LIBNOR) launched a food safety-training center in Sin il Fil.

Most of us have experienced a bad case of food poisoning. With time, we have grown accustomed to it and almost accepted it as part of the Lebanese norm. Concurrently, we forget about our simple right to safe food. While we wait for the draft law to be approved, the least we can do is learn how to check for products that do not meet standards, beginning with the simple step of checking expiry dates. Ultimately, we cannot deny that the Lebanese food campaign is more or less a wakeup call to question what we eat; one that has also geared the country in the right direction, ensuring that what we eat is safe.



## OUT LOUD

Should women expect a more difficult path to success in medicine?



“We never think of any specialty as not fit for a man, so why should any be not fit for a woman? There are countless examples of female physicians excelling in all specialties of medicine.”

*Farah Tabaja, Med IV*



“A major obstacle a female doctor faces when choosing surgery as a career is her own concern about fitting into a profession dominated by men. However, my experience after five years of residency has been that the reaction of my attendings, colleagues and community in general has been overwhelmingly welcoming and encouraging of my choice.”

*Arij El-Khatib, MD, Plastic Surgery Resident*

## THINK LIKE A WOMAN, ACT LIKE A PHYSICIAN

*Zeinab Olleik, Med IV*

March 8th of every year is International Women's Day. It is the day when the world celebrates women in their different roles as mothers, wives, daughters, as well as successful members of the work force. The number of female physicians has been increasing worldwide, and Lebanon is no exception. However, despite the increase in the number of Lebanese registered physicians from 6.9% in 1980 to 32% in 2009, the number of female medical practitioners remains unequal to their male counterparts. Female physicians still face obstacles throughout their career because of their gender.

It is a common assumption amongst the Lebanese that some jobs are not fit for women. Dr. Eman Sbaity, the first female surgeon to graduate from AUBMC's Department of General Surgery, and the first female attending in the department, received her fair share of this social bias. "To start with, we come from a society which does not think that women can do a lot of jobs, and one of them is definitely surgery. It's not an abstract idea. It's all the people you meet every day," Sbaity says. Although the Lebanese society has accepted females as physicians, it's still in the process of accepting them as surgeons. Furthermore, some Lebanese families still discourage medicine as a career for a woman because it entails long training and a probability of traveling abroad. Sbaity does not believe that the problem stems from society or from the family but rather from the individual woman herself. "Always believe that when you do a good job, people will get to see you as a good performer, regardless of your gender," she explains. "Females approach problems differently than males, and they depend on their individuality in such jobs."

Gender stereotypes link women to their traditional roles as wives and mothers. One of the main arguments against females choosing medicine as a career is that they can never succeed in maintaining an adequate environment at home while remaining hard at work in the healthcare field. Such social pressure leaves many female physicians with a constant feeling of guilt towards their children and families. "It takes a very considerate husband, a very supportive family, and cooperative kids who understand. If these ingredients are all there, the task can be done," says Dr. Souha Kanj Sharara, professor of Medicine and chairperson of the Infection Control and Prevention Program at AUBMC. Sharara, who was recently acknowledged for her hard work with the Research Excellence Award by the National Council for Scientific Research (CNRS), explains how she has been able to reconcile between her clinical duties, academic contributions, and family commitments and how she has always been keen to spend quality time with her family. "As a woman, I have the ability to be sitting here thinking about what I am going to have for dinner, what my son wants for his trip, what my patient needs, and whether I did the right thing for my research project, all at the same time. Women are very gifted with multitasking abilities that men don't have. I say that to the world," she adds. Eventually, children will be proud of their successful mothers and husbands of their successful wives.

Medicine is a tough career for any person, tougher still when in a society replete with such prejudice against women. In a time where people across the world are speaking up about gender equality, and in a time where gender roles are no longer as rigidly defined as they have been, women are in the perfect place to launch into whichever role and career they choose and excel at it. Nevertheless, choosing a career should never stem from pure opposition to norms, but it should emerge from passion for the career itself.

## POETRY STAND

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### MISSED

*Nicholas Batley, MD, Emergency Medicine*

Too well to stay on the stretcher he said

Beneath the ramparts of his swagger  
Foundations were crumbling  
Eaten away by unruly cells  
going where they liked,  
where they were not wanted  
Slowly growing chaos with a big 'C'

Too well to stay on the stretcher he said  
A week later he left

That cough?  
Not a goddamn virus  
Not even pneumonia  
That chest pain?  
Not acid heading north

Thick blood  
Thick with imposters  
Slowing, stopping  
Clotting  
In his chest, in his lungs  
Obnoxious, rude, not letting life flow  
Deciding that this was his time

The stethoscope over my shoulders  
Is a burden  
A cross (forgive my Catholic roots)  
An oh so heavy weight

I get so afraid  
I live with the terror of the miss  
The assumption  
The trust lost  
The life fumbled

Too well to stay on the stretcher he said  
A week later he left  
feet first

---

### A WORLD UNSEEN

*Zein Saadeddine, Med III*

The ghastly world, the negative of the real,  
where soft white glows and howling winds wail,  
where faint streams of winding smoke whirl  
through clear silent nights  
to make one aware  
of their dreary being.

Through open doors,  
they stealthily slide and float  
staring through eyes of sketched portraits on walls,  
dancing with curtains of open doors—  
unwelcomed guests,  
beasts feasting on every frightened breath.

In rooms of lonely children,  
their pale shadows shine  
tainting clear dreams of lilac in fields of green,  
turning them into gruesome scenes of ghostly thorny trees,  
making sleep an unwelcomed pain—  
a child's very grief.

In low voices,  
they speak  
whispering in every ear,  
yet no one perceives  
of what the other could hear—  
figures arising from within.

## OUT LOUD

Would you push to have EHR implemented at AUBMC?



“People often don’t realize that mental illnesses are of a biological origin, like cancer or diabetes; which is why funds like Embrace are crucial in society. They bring forth this knowledge, helping increase awareness and eventually decrease stigmatization.”

*Aya Hamadeh, Managing Editor*



“Education about the real nature of mental illness increases awareness about available treatments and any action that aims to replace the distorted image. It is about reacting effectively to prejudices and reducing myths about mental health.”

*Michel Daher, MD, Psychiatry Resident*

# THE EMBRACE FUND AND STIGMA SURROUNDING MENTAL ILLNESS IN LEBANON

*Sima Sharara, Med II*

One in every four people in Lebanon will develop a serious mental illness at some point in their life. If it’s not you, it’s someone you know and care about. Yet, mental illness still carries deep social stigma in Lebanon, and this directly impacts the daily experiences of these individuals, as well as their ability to cope with psychological illness. Despite the decades of unrest in Lebanon and the influx of over a million refugees displaced by war, acceptance of mental illness within our community remains inadequate, leaving many to suffer in silence.

Founded in October 2013, the Embrace Fund is a national coalition affiliated with the Department of Psychiatry at AUBMC that has pioneered efforts to tackle stigma and misconceptions regarding mental illness in Lebanon. Embrace is an awareness support network for mental health that employs community dialogue, media, and public education to destigmatize mental illness. Embrace also collects funds for the treatment of financially underprivileged individuals with mental illness, covering the cost of both inpatient and outpatient treatments. The financial burden of mental illness is a major obstacle preventing many Lebanese from seeking care, and Embrace aims to prevent the disabling consequences of untreated mental illness. Through all these efforts, Embrace Fund seeks to reduce the suffering of the patients and their families; it works towards alleviating the burden of mental illness on the Lebanese society.

Dr. Ziad Nahas, one of the co-founders of Embrace, emphasized the grassroots of the organization. “Every like on Embrace’s Facebook page and every individual attending any of the related events represent someone who supports us and is wholeheartedly connected with our activities. Our priority is not to promote the organization as much as to highlight the patients and their families.” He argues that healthcare in Lebanon is top down and patriarchal, and that this is more apparent when it comes to psychiatric care. “We are working on reversing that role and giving more value to the patients and their experience.”

During the year, Embrace held a campaign under the slogan Fikko el 3e’dah, or “untie the complex (knot)”, referring to the stigmatization about mental illness. The use of the word 3e’dah was powerful and intentional, as it is often derogatorily used to describe individuals suffering from mental illness in Lebanon. By applying this phrase to the Lebanese population, Embrace seeks to implicate society for having the complex, shifting the shame and responsibility from the individual with a mental illness to the Lebanese community as a whole.

In addition to this campaign, the Embrace Fund has used a variety of techniques for awareness and fundraising. In less than two years, Embrace has organized two memorial walks for suicide prevention, one of which was “Into the Dawn Walk.” These walks are the first of their kind in Lebanon and the Middle East. Embrace also organized a gala night and an art exhibition curated by a group of Lebanese artists, showcasing works of art created solely for the exhibition, depicting mental illness based on the artists’ own experiences and perceptions. Such creative, engaging, and accessible efforts increase awareness about mental illness in Lebanon, challenge the status quo of Lebanon’s neglect of psychological suffering and promise to change society’s conceptualization and reception of mental illness.

The need to protect the psychological wellbeing of those living in Lebanon is crucial, and the key lies beyond providing medical treatment. The root of social stigma and misconceptions must be deconstructed in order to promote open discussion surrounding an illness as important as any other: the illness of our minds. The Embrace Fund and similar rising efforts in Lebanon represent a promising step towards achieving this goal.



# VACCINES: A SOURCE OF MENACE OR A SOURCE OF HEALTH?

*Sara Moufarrij, Med III*

There is controversy behind any manmade innovation. But who would have thought that a medically sound, or rather, medically mandated item like a vaccine would cause such a stir in both Europe and, more loudly, in the United States? The US has recently succumbed to a nationwide outbreak of measles that has exceeded 100 cases, fortunately with no deaths on record. According to the Center for Disease Control and Prevention, 13 American states have been affected by this medical emergency. Last year, more than 4,100 cases were documented in Europe, according to the European Center for Disease Prevention and Control. How can such a preventative disease swipe across such a huge territory? It's simple: blame politics and the media.

Fears concerning vaccination stem from a fraudulent study that was published in the Lancet in 1998. Dr. Andrew Wakefield published an article that linked the childhood measles, mumps and rubella (MMR) vaccine to autism. The research was confirmed to be false and the article was retracted, with the main author found guilty of disregard for the health of children. Despite the truth being revealed, the debate rages on and has recently been revived by the American actress Jenny McCarthy. The presenter of *The View* has recurrently refuted scientific data and repeatedly clamored that autism is a direct consequence of the MMR vaccine. Her theory stems from the fact that she soundly believes that her autistic son, who received the vaccine, suffered from autism, and could only be cured by a gluten-free diet and metal chelators to eliminate the toxins caused by the vaccine. American politics was quick to pick up the debate, creating a bipartisan representation of the archaic Republican versus Democrat quarrel. President Obama, on the one hand, strongly stands by the physicians' standpoint that parents must vaccinate their children. Republicans seem to be a bit wearier about this conviction. According to Ron Paul, Republican senator from Kentucky, no law should control how parents handle their child's health: "If the state can track down and force citizens against their will to be injected with biological products of known and unknown toxicity today, there will be no limit on which individual freedoms the State can take away in the name of the greater good tomorrow."

So what is it then? Are vaccines harmful? Even though the controversy has managed to gain ground, it is very evident that vaccines rarely cause adverse reactions. According to the Committee to Review Adverse Effects of Vaccines, which published a document in 2011, it was confirmed that the MMR vaccine does not lead to autism and rumors linking the Diphtheria, Tetanus and Pertussis vaccines to Type 1 diabetes were also disproved. CDC further postulates that 732,000 American children were saved from death, and 322 million cases of childhood diseases were prevented between 1994 and 2014, all because of vaccines. Science clearly points one way, but that way doesn't seem to encourage many Americans or Europeans. Where do the Lebanese communities stand on this issue? We seem to be pretty compliant with our medical staff. Maybe it is time for the American people to follow the Lebanese path and allow doctors to take the lead on the debate and encourage politicians to mute their microphones.



## OUT LOUD

What are your thoughts on the Children's Heart Center at AUBMC?



“The Children's Heart Center is a charity association established in Lebanon, and more specifically at the American University of Beirut Medical Center, to help financially limited children with congenital heart defects. To date, the Children's Heart Center has helped hundreds of children and is planning to help much more as time goes by.”

*Nadim Majzoub, MD,  
Pathology Resident*



“Mending broken hearts, literally, the Children's Heart Center is a truly remarkable association that extends its helping hand to anyone who needs it.”

*Sarah Traboulsy, Med II*

## HEALING WOUNDED HEARTS

*Samer El Hayek, Med III & Ghina Fahkri, Med III*

Congenital Heart Disease (CHD) is the most common birth defect and one of the leading causes of death in the first year of life. Annual estimates show that nearly 700 newborns and children in Lebanon are diagnosed with heart disease. More than two thirds of them necessitate treatment, which, if unavailable, will not allow children to survive past their first birthday. Nevertheless, upon providing appropriate care, almost 97% of cases will be cured, and these children can lead normal lives.

Devoted to delivering state-of-the-art medical therapeutic techniques for young patients with congenital and acquired structural heart disease, the Children's Heart Center (CHC), established twenty years ago at the American University of Beirut Medical Center, has grown to become a leading healthcare center in Lebanon, the region, and far beyond.

Dr. Fadi Bitar, the Founder and Director of the CHC, co-Director of the Congenital Heart Disease Genetics Program, Associate Dean for External Medical Affairs, and Professor of Pediatrics and Adolescent Medicine, explained that AUBMC has always fostered centers of excellence that are patient-oriented to provide patients with the best medical care.

The CHC delivers a continuum of medical services to diagnose as well as treat congenital and acquired heart diseases in children, through the application of sophisticated invasive and non-invasive cardiac procedures. A multi-disciplinary team of more than fifty physicians, nurses and professional healthcare providers is dedicated to provide the best care and the best outcome for patients. As Dr. Bitar said, “The best results come when you build a system.” Indeed, the CHC team encompasses a kaleidoscope of healthcare providers from various specialties in the field of pediatric cardiology, who deliver the finest medical programs ranging from diagnostic techniques to interventional therapies and cardiac surgery.

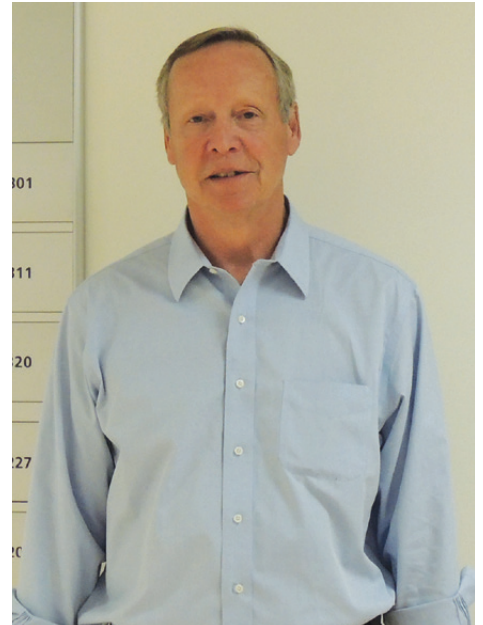
Since its establishment, the CHC has aimed to become not only a local but also an international hub that delivers a preeminent level of healthcare. Indeed, much has been accomplished throughout the years. The CHC team has introduced new modalities and techniques for treatment of heart disease, including procedures that had never been performed elsewhere in the world. Additionally, the CHC reported discoveries of novel genes related to CHD. Dr. Bitar emphasizes that “the outcome measures of CHC are comparable to the best in the world.”

In November 2003, the Brave Heart Fund (BHF), a benevolent funding enterprise, was established by volunteers and eager and enthusiastic professionals, including Dr. Bitar himself. The fund was meant to cover the charges of treatment of disadvantaged children suffering from CHD irrespective of their gender, religion, or ethnicity. Ever since, the Fund has constantly been striving to increase awareness about children's cardiac diseases and encourage early screening in order to prevent unnecessary suffering. Dr. Bitar asserted that “since its creation, the BHF has rescued more than 2500 lives.” Around 350 procedures and surgeries are covered by the BHF every year, thus fulfilling its motto: “No child should die from heart disease because of a lack of funds.”

With the exponential rise in the number of admitted patients, the support of the Lebanese society in general and the AUB community specifically becomes fundamental to the survival of children with heart disease. “We would love to have more volunteers from the students in the future.” says Dr. Bitar. Ultimately, unconditional help makes miraculous differences: it can heal wounded hearts.



# INTERVIEW WITH RALPH GORDON COREY, MD



*Interview was conducted by Mohamad Raad, Med IV*

**Q: What is your title at Duke University School of Medicine?**

A: Gary Hock Distinguished Professor of Global Health, Vice Chair of Education and Global Health, Director Hubert-Yeargan Center for Global Health, Professor of Medicine, Pathology and Infectious Diseases.

**Q: What do you find most challenging about your job?**

A: Managing to give enough time to both work and family.

**Q: What do you enjoy most about your job?**

A: I love taking care of patients, rounding, and teaching. I love mentoring students, residents, fellows and young faculty members, and I enjoy watching them succeed. I love working on global health and learning from the people and patients I help care for. I love doing clinical research and participating in clinical trials. I have the perfect job, and so I enjoy going to work each morning.

**Q: When you were a medical student, how did you finally come to choose your specialty?**

A: I tried working in Nephrology and Cardiology before deciding on Infectious Disease. They were theoretically fascinating but did not appeal to me practically. Infectious disease is exciting; you always see new things, and you make sure to keep up with the developing specialty. But truthfully, I greatly enjoy all aspects of internal medicine and enjoy learning from my patients each day.

**Q: What are your thoughts on AUBMC and its students?**

A: We have had many residents from AUB at Duke over the years. They have all been terrific. They enjoy learning, caring for patients, and conducting research. In addition, they are kind, hardworking, intelligent, and enthusiastic towards their work. They are among the best residents I have helped teach and mentor over the past 30 years.

**Q: Which profession other than your own would you like to attempt?**

A: Nothing. I have the perfect job.

**Q: Which profession other than yours would you never attempt?**

A: I would never attempt the work of a politician or lawyer.

**Q: Did you enjoy your stay in Lebanon? What did you enjoy the most?**

A: Absolutely. I enjoyed being around my friends and seeing what they are doing here at AUBMC.

**Q: What do you do in your free time?**

A: I love being outdoors. I enjoy running, playing basketball, reading and spending time with my children (all 5!).

**Q: What is your favorite song/artist?**

A: Favorite artists/groups are Sting, Sugarland, and Journey. I enjoy upbeat Country music as well.

**Q: What is your favorite book(s)?**

A: "The Winds of War and War and Remembrance" by Herman Wouk; "Unbroken"; and "Trinity".

**Q: What advice would you give to medical students at AUBMC?**

A: Keep doing what your teachers have been doing: work hard, read voraciously, take meticulous care of your patients, participate in moving medicine forward, and stay humble. Always remember that we are the servants of our patients (The patient never inconveniences the doctor!). Medicine is the best profession in the world. Enjoy it!

In March 2015, AUBMC was honored to host Dr. Ralph Gordon Corey of Duke University, a world leader in infectious diseases, global health and medical education, and a long-time friend of our institution. During his visit, Dr. Corey met with institutional leaders such as President Peter Dorman, AUBMC faculty, residents, and medical students through a number of activities organized by the Department of Internal Medicine. Dr. Corey also gave a presentation on "Staphylococcus aureus Bacteremia and Endocarditis" through the Medical Grand Rounds at AUB. Furthermore, Dr. Corey rounded with Infectious Disease service at AUBMC, partook in the residents' morning reports, and interacted with students during their afternoon round on 5-South. The residents and students also had a chance to benefit from his knowledge and expertise in the field of infectious diseases and medicine at large.

## OUT LOUD

What are your thoughts on this year's NGA?



“The General Assembly is an eye opening experience. You realize you're part of something bigger than just your national committee and that you can make an impact on an international level.”

*Ahmad Mourad, Med IV*



“The GA was a memorable experience. I had the opportunity to meet people from different backgrounds and cultures who are just as passionate about medicine as I am. I learned a lot from the inspiring public health projects they organize in their countries and of course made a group of friends.”

*Reem Akel, Med IV*

## IFMSA GENERAL ASSEMBLY: THIS MUST BE IT!

*Farah Tabaja, Med IV*

From March 2<sup>nd</sup> to March 8<sup>th</sup> of this year, the beautiful city of Antalya in Turkey hosted the largest meeting of medical students worldwide: the General Assembly of the International Federation of Medical Students' Associations (IFMSA). The General Assembly (GA) is a biannual meeting where all the national member organizations (NMOs) of the IFMSA assemble to discuss issues of interest to medical students, share ideas and projects, sign contracts for research and professional exchanges, and vote on important federation decisions.

This year, 14 students from four different Lebanese medical schools headed for Antalya to represent the Lebanese Medical Students' International Committee (LeMSIC) in its parent organization's March Meeting. Students joined different sessions, ensuring that LeMSIC was represented at every facet of the GA.

Topics discussed during the sessions ranged from reproductive health, gender based violence, global and public health, human rights and refugee issues, to medical education, research, and professional exchange programs. President sessions and plenaries allowed delegation presidents to deliberate the common challenges faced in different countries and vote on IFMSA matters.

After sessions, lunch was a sacred hour where the entire Lebanese delegation met to share the day's proceedings and decide on LeMSIC's position regarding matters that required voting. In the afternoons, members attended training sessions that aimed at sharpening teamwork skills, emotional intelligence and leadership. They also had the chance to attend conferences related to the GA theme. This year's theme, 'Humanitarian Action,' focused on the refugee crisis, whereby speakers from international organizations shared valuable insights regarding the positive role medical students play worldwide in important global issues.

At the Exchange Fair, every country promoted its exchange program and introduced it to other NMOs, ultimately signing the contracts that will allow the Lebanese first year medical students to have their exceptional exchange experiences during the upcoming summer. The LeMSIC stand was so popular that it won second place in the best stand contest, and all members left the fair sporting bracelets emblazoned with the Lebanese flag. LeMSIC was awarded 2<sup>nd</sup> place among 99 other NMOs for its academic quality and rich social program.

Bringing together such a diverse group of students, the GA wouldn't have been complete without daily social programs allowing people to socialize and form connections and long lasting friendships. This included a cultural show during which every country showcased its traditional dance (including our beloved Dabke) and the famous National Food and Drinks Party where each country brings along its traditional food and drink and shares it with the attendees in the midst of a cultural melting pot. The General Assembly was a genuine and unique experience. Witnessing medical students in action at a global level is truly rewarding: it inspires a local implementation of some of the ideas, discussions, and decisions deliberated at these meetings. Members of the Lebanese team left Antalya motivated to live up to the IFMSA core value: Think globally, act locally!



# THE “DIFFERENT” PATIENT

*Rebecca Andraos, Med IV*

Wise was the one who said, “The one thing we all have in common is that we are all different.” Sometimes the distance we create between us and “the other” is just the product of ignoring who that other really is. Yet, instead of exploring our differences, we feel more comfortable when dealing with the similar, afraid of what we would discover if we stepped away from “the familiar.” Consequently, we avoid talking about “the different,” even in whispers, with a strong conviction that if it is not communicated out loud, it ceases to exist. However, this will merely make it grow until it bursts, and until what is buried beneath outgrows what lies on the surface.

As physicians, we deal with “the other” at its most vulnerable point; our patients entrust us with their lives, their identity, and their individuality. The least we can do is accept who they are and provide them with the best healthcare services possible. In order to ensure the latter, we need to understand their background and what makes them who they are. We need to overcome the “taboos”, rather than adopt them, and we ought to dismiss the prejudice created by society in order to “see our patient” with enough transparency.

To introduce these concepts to medical students, LeMSIC (Lebanese Medical Student International Committee), SCORA, SCOPH and SCORP (Standing Committees on sexual and reproductive health including HIV/AIDS, Public Health, and Rights and Peace, respectively), in collaboration with LebMASH (Lebanese Medical Association for Sexual Health), organized a two-day workshop on “Providing Healthcare to Diverse Populations.” The workshop covered sessions on how to ensure that LGBT (lesbian, gay, bisexual, and transgender) community, people with special needs, and refugees received access to healthcare services equally and without discrimination. Physicians, professors and specialists led interactive discussions tackling a variety of LGBT specific topics including LGBT mental health, common STIs in the LGBT community, lesbian health and anal health. They also addressed the relationship between disabilities, human rights and health care, and refugees’ health care. The sessions focused on providing medical students with enough background on these populations, their most common complaints, illnesses, concerns; they also received updates on instrumental actions to deal with them. The workshop stressed the importance of a doctor patient relationship free of judgment and discrimination, paving the way for further equality in healthcare.

The workshop provided future physicians with the opportunity to overcome barriers when dealing with a diverse patient population where each deserves an equal opportunity for treatment. Attendees, who came from different backgrounds and shared diverse opinions and perspectives, left the workshop with a unified message: Our patients have the right to choose the person they want to be, and we don’t have the right to evaluate how life turns out for them or provide them with inferior healthcare services. We should understand that accepting others as they are is not a betrayal of our identity and beliefs as much as it is an evolution of humanity. Let us not categorize, segregate or label people: our “MD” does not give us that right. Rather, it compels us to see beyond the sexual identity and orientation, past the socioeconomic class and farther than the disability. It motivates us to see the patient as an individual and provide him or her with the best possible care, regardless of his or her dissimilarities; we are all different, and there are no “rights and wrongs” in ones choices and preferences.

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## LEMSIC RESEARCH DAY – CELEBRATING RESEARCH ACROSS LEBANON

*Ribal Haddad – Med IV*

The 9<sup>th</sup> Annual Research Day was held this year on April 22nd, 2015 at Issam Fares Lecture Hall. Research Day is part of an ongoing effort to help foster a spirit of research and innovation within Lebanon and the student community. Each year, student research is displayed and rewarded with various prizes that range from monetary rewards or trips to showcasing their research at a convention. This year, Research Day tried to display the work done not only at AUB but also at other Lebanese medical institutions with presentations that covered topics ranging from kidney transplants to attitudes of physicians toward homosexuals and transsexuals. The day itself comprised of both poster and oral presentations that spanned basic science, clinical and social medicine. Four guest speakers discussed their research experience in Lebanon. Dr. Joseph Maarawi from Université Saint Joseph (USJ) and Hotel Dieu de France (HDF) gave a briefing about his research and the attitudes and perceptions of research at USJ. Dr. Constantin El-Habr, dermatologist at St. Georges Hospital, explained that research can be found anywhere. Dr. Elie El Chaer, neuroscientist at AUB, gave a passionate oration of the rewards of research. Finally, infectious disease specialist, Dr. Zeina Kanafani, wrapped up the session with an overview of her research at AUBMC. A research database was also published in the Research Day’s booklet. This database details all the research currently occurring at AUB, USJ, the Lebanese American University (LAU) and the University of Balamand (UOB) as well as the contact information of the laboratory group in charge. It is meant to bring together eager students and enthusiastic researchers. This year’s Research Day was a success, and the team hopes to make the 10<sup>th</sup> annual commemorative Research Day a premier event next year.

## OUT LOUD

How did you feel after trying yoga for the first time?



“After a few sessions of yoga, I realized how little I knew about how much my body could accomplish, let alone my mind.”

*Omar Osman, Med III*



“Yoga taught me to pay attention to my breathing even when I wasn't in yoga class. It helped me control my body, starting at my toes and moving up.”

*Lina Deghayli, Med III*

## THREE'S A CROWD

*Liane Sadler, Med III*

“People do their work and live their life three times more than they are supposed to: once in anticipation before the fact, once in the actualization during the fact, and once in regret or rumination after the fact.”

The woman who wrote these words is also the one who, five years ago, carefully instilled in me the principles of yoga (whilst occasionally teaching me how to stand on my head, of course). I have yet to single out this mysterious practice into a category: a dance, a sport, a relaxation method or a tribal humming circle, all are forms by which yoga charms me into a pensive retreat.

Spend a couple of minutes meditating every morning or occasionally engage in an hour-long Bikram yoga class and you are assured a substantial mind shift. Yoga aims to transform the habit of regret, worry and anticipation into a habit of being in the present time. The way to achieve this is to fine-tune the way you perceive your environment by experiencing the current moment outside of its immediate context.

If this is starting to sound very abstract, you are not alone. Upon teaching yoga to a few of my classmates, I found that the notions of presence and stillness were difficult to preach. Besides the fact that every person has the tendency to dwell on the past and worry about the future, medical students measure their time with upcoming TBLs, USMLE books and other acronyms of the like, making it very difficult to focus on the 'now'. Ironically, by constantly dwelling over time stamps that we have no control over, we end up wasting the only time we can control: the present.

Providing yoga classes for medical students has been very fulfilling, as students are often unaware of what to expect. A medley of soothing tunes, long stretches and wacky arm balances encourages students to strengthen their bodies and minds by slowly letting go (both, literally and figuratively).

In my experience, the benefits of yoga not only surface in the form of a healthy exercise fix, but eventually as a cumulative and durable regulation of my mental state. Yoga acts as my time compass, redirecting my energy and attention towards the present day.



# TAKE YOUR OWN ADVICE

*Rawan Safa, Med II*

Routine is good; it puts our day into perspective and simplifies our lives. Routine transforms our lives into a fixed program, with the sequence of events regularly going on repeat. This change defines the tempo that medical students abide by as they pursue their careers toward becoming life-changing physicians. However, all students eventually reach a point where they feel that, ironically, the routine has become hectic and is consuming their lives.

The main goal for physicians and medical students is to ensure the wellbeing of their patients. This is achieved not only by giving the best treatments, but also by encouraging patients to pursue a healthy lifestyle, which, after all, is the best way to combat health conditions and disease. Are we as medical students following the advice which we will ultimately be promoting to our patients? Unfortunately, most of us have abandoned the idea of being healthy and fit due to the overly stressful life we lead. Most of us have lost touch with any form of sports upon matriculating into medicine. However, should we allow stress to control our lives leaving behind our own advice?

Dr. Rana Sharara, a successful pediatrician, has always managed to find time for sports throughout her medical career. Even during her years of studying, she has managed to be ranked first in her class and was able to hit the gym for about an hour a day. Most of us, including myself, would counter this by saying that the time spent at the gym could be spent studying, and thus our scholastic performance could be improved without the gym. Yet, how many times do we sit by our books in an attempt to retain information but are not able to because we are so tired and ineffective? Dr. Nadine Darwiche, along with Dr. Jad Melki, founded the AUB Faculty Activities in 2009. Dr. Darwiche explained that the time you spend practicing sports does not affect the time you spend studying in any way. On the contrary, it puts you more at ease, releases the stress, and most importantly, establishes a healthy lifestyle.

Is it possible to be a medical student and still exercise regularly? Dr. Sharara also pointed out that sometimes our schedules can get hectic, and we might find ourselves unable to find the time to work out, and consequently, we would stop all activities. Taking Dr. Darwiche's advice, one should always find the time to exercise. Exercising and staying fit is a student's and physician's priority and a major part of their schedule. We should set realistic goals, even if we only exercise twice per week. Start building exercise into your daily routine by joining a team sport or participating in a new activity. In order to stay motivated, one should mark their exercising activities and evaluate themselves every month or so.

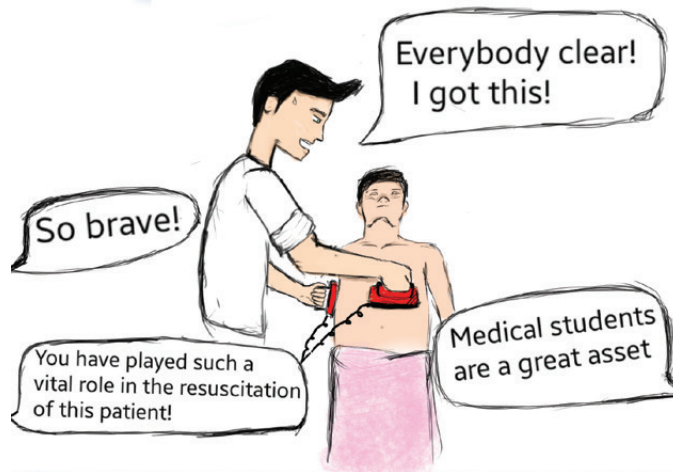
According to Charles Duhigg, the author of "The Power of Habit," routine is a behavioral aspect of a habit. We adopt a habit to help us meet our goals. Therefore, if routine starts to consume our lives, we must mend our daily activities in order to stay happy and healthy, and for many, this includes sports. Once we have these habits set in order, we will have the mental energy to concentrate better and avoid stress.



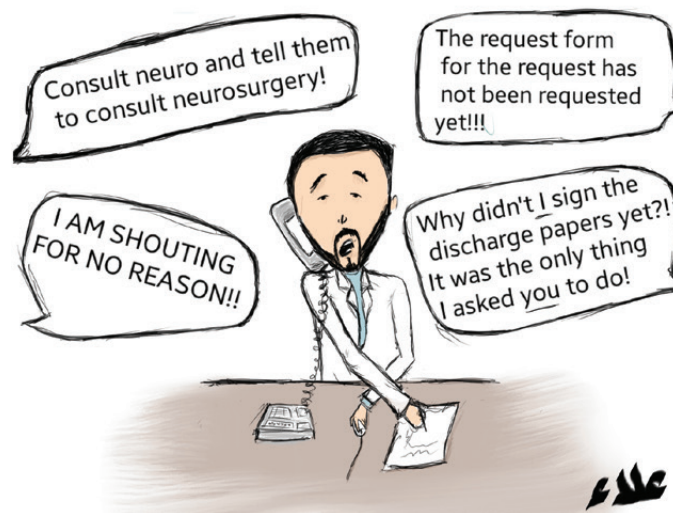
**FM 20/20 Volley Ball Team 2014**

Left to right: Dr. Faek Jamali, Dr. Raja Chaaban, Dr. Nadine Darwiche, Dr. Elie Hobeika, Dr. Ghassan Chamseddine, Dr. Elias Zgheib, Dr. Roddy Faddoul

# Expectations



# Reality



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