



UNIVERSITY OF
BALAMAND

FACULTY OF HEALTH SCIENCES

ANNUAL REPORT 2023

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PREFACE

The year 2023 was an exceptionally challenging and productive year for FHS. The Lebanese economic and financial crisis resulted in the departure of a number of full time faculty members; as such faculty recruitment once again became a major priority for FHS this year. Vacancies were advertised, search committees were appointed, and candidates were shortlisted and interviewed. This has resulted in the appointment of six new faculty members; five Ph.D. holders and one instructor. An important achievement was the appointment of two postdocs in the nursing and nutrition programs. The Center for Health Research (CHR) has witnessed an increase in faculty research projects and productivity as well as in the organization of a variety of research and methodology-specific lectures. Particularly noteworthy this year, is the creation of a collaborative interdisciplinary thematic project on smoking, aimed at promoting close cooperation between FHS faculty and external collaborators. This initiative is currently led by Dr. Jessica Saliba and promises to secure additional intra-and extramural funding. FHS research output has significantly increased in the last three years; FHS faculty are currently involved in 68 research projects and have published 15 articles in international peer-reviewed Scopus journals. In addition, the proposal to launch an Interdisciplinary PhD program at FHS was completed, approved by UOB and submitted to the Ministry of Education and Higher Education for approval before launching. Furthermore, a proposal to launch a 12-credit online certificate program in Health Informatics was approved and will be launched in spring 2024. Of significant importance is the ongoing progress on the accreditation of FHS academic programs; nutrition and nursing are currently finalizing their self-studies in preparation for the planned site-visits in April and July 2024, respectively. The community engagement department continues to be actively involved in a large number of funded community projects. This annual report gives detailed information on the FHS activities in 2023. We hope you find it useful.

Dr. Huda Abu-Saad Huijer
Dean, Faculty of Health Sciences

FHS FACULTY

Abbas, Nivine	Ph.D., Social Sciences and Environmental Studies, University of Twente, Netherland
Abdel Karim, Carole	Master of Science in Pharmacology and Therapeutics, American University of Beirut, Lebanon (until August 2023)
Abdel Rahman, Abir	Ph.D., Public Health & Psychological Sciences, University of Strathclyde, Scotland
Abdo, Elias	Ph.D., Molecular Biology, University of Montpellier France II,
Abou Lteif, Ghada	M.S., Biology, American University of Beirut, Lebanon
Abu-Saad Huijer, Huda	Ph.D., Curriculum & Instruction, Nursing Science, University of Florida, Gainesville
Aoun, Habbouba	Doctorate of Public Health, Atlantic International University, U.S.A.
Azar, Mathilde	Ph.D., Health Sciences, University of Dundee, U.K.
Baissary (AL), Charbel	Ph.D., Medical Microbiology, Lebanese University, Ph.D., Human Pathology Infectious Disease, Aix Marseille, France
Bassila. Joelle	M.S., Nursing, American University of Beirut, Lebanon (Until May 2023)
Chabbani, Sana	Ph.D. in Education, Universite Saint Joseph, Lebanon
Chamieh, Hala	Ph.D., Molecular and Cellular Biology / Biochemistry, University of Joseph-Fourrier, Grenoble France

Daher, Mira	Ph.D., Agricultural & Food Sciences, Université Saint Esprit, Kaslik
Dano, Dominique	Ph.D., Health and Life Sciences, Lorraine University, France (until August 2023)
Dassouki, Zeina	Ph.D., Hematology & Oncology, Universite Paris Diderot, France
Deghel (EL), Maria	M.S., Microbiology, Université Saint Joseph, Lebanon
Dib, Liza	M.S., Microbiology, Lebanese University, Lebanon
El Chaar, Mira	Ph.D., Molecular Microbiology, University of Cambridge, U.K.
Finianos, Jessica	Ph.D., Health Psychology, Universite Rovira, Spain
Germanos, Peggy	M.S., Nursing, St. Joseph University, Lebanon
Greige, Layal	M.S., Immunology and Microbiology, American University of Beirut, Lebanon
Habib, Hiba	M.S., Nursing, St. Joseph University, Lebanon
Haddad, Lara	Ph.D., Immunology, University of Aix-Marseille II, France
Hourani, Rabab	Master Business Administration, Ecole Superieure des affaires ESA, Lebanon
Jaalouk, Lina	M.S., Health Promotion Management, Marymount University, U.S.A.

Saada Jurdi	Ms., Epidemiology & Biostatistics, American University of Beirut, Lebanon
Joanne Karam	Ph.D. in Nutrition and Food Science, University of Balearic Islands, Spain (Until August 2023)
Kobrossy, Micheline	M.S., Occupational Health, University of Birmingham, England
Maarawi, Thérèse	M.S., Chemistry, University of Balamand, Lebanon
Mardirossian, Jean Marc	B.S., Medical Laboratory Sciences, University of Balamand, Lebanon (Until August 2023)
Mrad, Myriam	Ph.D., Epidemiology & Public Health, Université Pierre et Marie Curie- Paris VI, France
Mnayer Dima	Ph.D., Safety & Quality of Natural Plant Products Universite d'Avignon et des pays de Vaucluse, France
Rouaiheb (El), Hiba	M.S., Food Technology, American University of Beirut, Lebanon
Rizk Maud	Ph.D., Medicine, cancerology,genetics & Hematology University of Burgundy, France
Saliba Jessica	Ph.D. in Biology and Chemistry for Health Sciences (Pharmacochemistry and Biomolecules) Université Montpellier I, France
Serhan, Mireille	Ph.D., Food Engineering and Biotechnology, National Polytechnic Institute of Lorraine, France
Shoucair, Gretta	M.S., Food Technology, American University of Beirut, Lebanon
Tohme Jessy	B.S., Medical Laboratory Sciences, University of Balamand, Lebanon

Wakim, Zeina	D.E.A., Social Sciences, Lebanese University, Lebanon
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Whaibeh Emile	M.S., Public Health, University of Balamand, Lebanon
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FACULTY RECRUITMENT

Mira Daher	Ph.D., Agriculture & Food Sciences, Université Saint Esprit, Kaslik
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Zeina Dassouki	Ph.D., Hematology & Oncology, Universite Paris Diderot, France
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Jessica Finianios	Ph.D., Health Psychology, Universite Rovira, Spain
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Saada Jurdi	Ms., Epidemiology & Biostatistics, American University of Beirut, Lebanon
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Dima Mnayer	Ph.D., Safety & Quality of Natural Plant Products Universite d'Avignon et des pays de Vaucluse, France
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Maud Rizk	Ph.D., Medicine, Cancerology, Genetics & Hematology University of Burgundy, France
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FHS STAFF

Atallah, David	IT Assistant
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Chaddad, Rita	Students Services Officer
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Constantine, Catherine	Executive Officer
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Hosni, Hala	Accreditation Officer (until August 2023)
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Khalil, Mayssa	Secretary
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Khamis, Youssef	Office Assistant
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Khater, Paul	IT Supervisor
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Khoury, Joelle	Financial Project Coordinator
Lahoud, Cecile	Executive Secretary
Makhoul, Sethrida	Receptionist

PART-TIME FACULTY

Abdel Sater, Sabine	M.S., Public Health University of Balamand, Lebanon
Abdel Karim, Carole	Master of Science in Pharmacology and Therapeutics, American University of Beirut, Lebanon
Abou Hamdan, Mohamd	Ph.D., Neurosciences, Universite Marseille, France.
Abi Hanna, Jowy	M.S., Public Health University of Balamand, Lebanon
Abdallah, Ahmad	M.S., Public Health, American University of Beirut, Lebanon
Abou Samra, Murielle	M.S., Nutrition & Dietetics, American University of Beirut, Lebanon
Abou Zaki, Ram	Doctorate of Medicine, University of Balamand.
Accary, Claudine	Ph.D., Pharmacology National College of Veterinary Medicine, France
Akel, Nada	M.S., Chronic Disease & Clinical Nursing, Lebanese University.
Assaad, Chafica	Ph.D., Basic Medical Sciences, American University of Beirut, Lebanon

Azar, Nadine	B.S, Nursing Lebanese German University
Azar, Nagham	MD, Family Medicine University of Balamand
Barakat, Sabine	Ph.D., Enviromental Chemistry, University of the West of England.
Badran, Ghandoura	B.S., Medical Laboratory, Lebanese University, Lebanon
Barbour, Jessy	Midwife, Lebanese University
Bassil, Marcel	Ph.D., Molecular physiology University of Montreal, Canada
Bou Nader Rana	M.S, Sciences Maieutiques, Saint Joseph University, Lebanon
Braidy, Salah	Ph.D., Forensic Sciences, Kingston University, U.K.
Chamoun, Marianne	Ph.D. candidate, nursing, Laval University- Canada.,
Chaya, Hady	Masters, Nursing Antonine University
Chalhoub, Jessica	M.S., Private Law, Lebanese University
Choueiry, Camille	M.D., Pathology, Saint Joseph University, Lebanon
Dassouki, Zeina	Ph.D., Hematology & Oncology, Universite Paris Diderot, France
Dableh, Saydeh	Master of Business Administration,

	Dauphine University – Paris, Panthéon Sorbonne – Paris, France
Dernaika, Fouad	M.S., Pharmacy, Lebanese American University, Lebanon
Fakhry, Charbel	Master, Business Administration, Université Saint Joseph, Lebanon
Fattouh, Nour	Ph.D., Biology & Health, University of Montpellier, France
Georges, Vicky	M.S., Nursing, St. Joseph University, Lebanon
Ghadieh, Joelle	M.D., Obstetrics and Gynecology, University of Balamand, Lebanon
Ghalmouch, Hoda	Ph.D., Systems Optimization and Dependability, Troyes University of Technology, France
Ghauche, Claude	M.S., Public Health, Antonine University, Lebanon
Gemayel, Christine	M.D., Pathology, Holy Spirit University, Lebanon
Ghosn, Nada	M.D., Public Health, Lilles II University, Paris, France
Hamadeh, Eva	PhD, Biochemistry University Lyon I, France
Hamouche, Shaza	Ph.D, Molecular Biology, University of Lorraine, France
Hatjian, Berj	Ph.D., Environmental & Occupational Toxicology, University of Newcastle Upon Tyne, England
Hokayem, Jihad	D.E.A., Finance, Saint Joseph University, Lebanon

Hteit, Racha	EMBA LAU, Beirut
Ismail, Mohamad	Ph.D, Immunology, Lyon, France
Ismail, Zouheir	Master, Business Administration, San Jose State University, U.S.A.
Jannoun, Noura	M.S, nursing American University of Beirut, Lebanon
Jreije, Jocelyne	M.S., Computer Sciences, University of Balamand, Lebanon
Kallasy, Lea	MD, Family Medicine University of Balamand
Kamel, Rima	Ph.D, Physiologie Universite D'Angers, France
Kanbar, Lodine	M.S., Psychology, Holy Spirit University, Lebanon
Kanaan, Iman	Ph.D, Education, Doctoral School of Literature, Lebanon
Karam, Louna	Ph.D., Molecular Biology LU - Universität Erlangen (Germany)
Kawkab, Rim	M.S, Epidemiology, American University of Beirut, Lebanon
Khalifeh, Nassab	M.S., Industrial Technology, Université Saint Joseph, Lebanon
Khatib, Jinan	M.S., Forensics, University of Technology Sidney, Australia

Khatib, Rolla M.S., Physiology Concentration Hematology,
American University of Beirut, Lebanon

Klayme, Nelly M.D., Family Medicine,
Saint Joseph University, Lebanon

Khysho, Joelle M.S, Nursing
American University of Beirut

Lattouf, Hanine Ph.D., Cancerology,
Université Claude Bernard, France

Masri, Nancy Dr, in Pharmacy
Lebanese University, Lebanon

Masri, Saadieh Masters, Public Health,
American University of Beirut, Lebanon

Masri (Al), Zeina Master, Public Health,
University of Balamand, Lebanon

Massouh, Angela Ph.D., Nursing,
Univeristy of Coloroda, U.S.A.

Matta, Judy M.D., Pediatrics,
University of Balamand, Lebanon

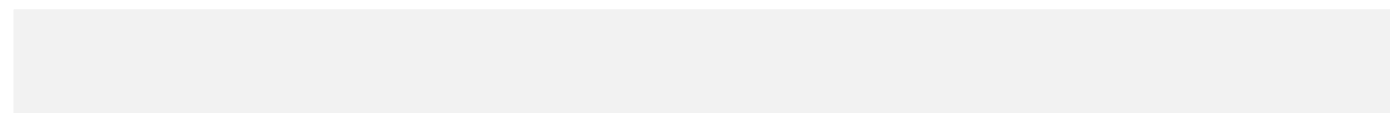
Meguerian, Zarouhie Pathology,
Saint Joseph University, Lebanon

Melki, Pamela Ph.D., Toxicology and Environmental Sciences,
University of Littoral Côte d'Opale, France

Mayssam, Moussa Ph.D., Biomedical Sciences,
Saint Joseph University, Lebanon

Naim, Mona M.S., Clinical Embryology,
University of Leeds, London

Omari, Sarah Ph.D., Epidemiology, American
University of Beirut, Lebanon



Rabbaa, Sally	Doctor of Business Administration University of Balamand, Lebanon
Sabbagh, Rachel	M.S., Mental Health and Psychiatric Nursing, American University of Beirut, Lebanon

Saleh, Rima	D.B.A Sorbonne University, Paris, France
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Tamim, Rabih	PharmD Saint Joseph University, Lebanon
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Zgheib, Georges	M.S., Hospital and Health Management, ESA, Lebanon
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PART-TIME PRECEPTORS

Andraos, Dalia	DU, Reanimation, Lebanese University, Lebanon
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Alaaeddine, Nourhane	B.S., Nursing, Lebanese University
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Arsanios, Hanane	TS, Nursing, ISSI, Lebanon
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Artinian, Meghry	B.S., Nursing, University of Balamand, Lebanon
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Attieh, Fadia	D.E., Oncology, University Saint Joseph, Lebanon
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Bou Serhan, Candy	B.S., Nursing, Lebanese University, Lebanon
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Boutros, Jocelyne	Certificate, Nursing, Université Saint Joseph, Lebanon
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Chahine, Liliane	B.S., Nursing, Red Cross University, Lebanon
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Chahinian, Tsolit	B.S., Nursing,
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Chahoud, Remie	LGU, Lebanon BS – Nursing/Midwife, Lebanese University, Lebanon
Chantiri, Jeanette	M.S., Epidemiology, Lebanese University, Lebanon
Darwich, Hiba	M.S., Practice in Obstetrics, Saint Joseph University, Lebanon
Edelbi, Abir	License Technique, Nursing, School of Nursing, Bir Hassan College
Fayad, Khalil	M.S., Hospital Risk Management, Lebanese University, Lebanon
Issa, Nour	B.S., Midwifery, Saint Joseph University, Lebanon
Gerges, Tony	B.S., Nursing, Lebanese University, Lebanon
Ghadban, Reem	B.S., Nursing, Lebanese university
Hachem (El), Nadine	B.S., Nursing, Université Antonine, Lebanon
Karam, Patricia	B.S., Nursing,
Karam, Fadia	B.S., Laboratory Sciences, Lebanese University, Lebanon Saint Georges University, Lebanon
Kerbage, Simon	Master 2, Accompagnement Psychosomatique Lebanese University, Lebanon
Kfoury Hadchity, Darine	BS, Nursing, University of Balamand
Khawli, Waed	B.S., Nursing

	Lebanese University, Lebanon
Koussayer, Caren	B.S., Nursing Lebanese University, Lebanon
Madi, Georges	B.S.N., D.U., Oncology, Saint Joseph University, Lebanon
Madi, Sabine	B.S., Nursing, Lebanese University, Lebanon
Rouhana, Christine	M.S., Hospital Risk Management, Lebanese University, Lebanon
Sharafeddine, Zeina	Dip, Nursing, Saint Joseph University, Lebanon

CURRENT VACANCIES

- Nursing: Ph.D. holder nursing faculty to lead the graduate MSN program and full time instructors.
- Public Health: Ph.D. holder faculty with expertise in Health Care Management/Health Administration.
- Communication/Research Officer.

HONORS, AWARDS, AND RECOGNITIONS

- **Dr. Huda Abu-Saad Huijer**, Outstanding Author by Annals of Palliative Medicine.
- **Dr. Huda Abu-Saad Huijer** appointed Adjunct full professor, Johns Hopkins University School of Nursing, U.S.A.
- **Dr. Huda Abu-Saad Huijer** ranked among the top 2% of researchers worldwide, according to an international study by AD Scientific Index, # 1 at University of Balamand, and Number 11 in Lebanon.

- **Dr. Nivine Abbas** appointed as a Member of the IRB committee at the University of Balamand (starting July 2023).
- **Dr. Abir Abdel-Rahman** appointed external advisor for the Faculty of Health Sciences, Beirut Arab University.
- **Dr Charbel Al-Bayssari** ranked Top 500 scientists in Lebanon and Top 14 in Balamand (Adi scientific 2024)
- **Dr. Dima Mnayer**, ranked among top 1000 scientists in Lebanon (ADI Scientific Index)
- **Dr. Dima Mnayer**, received a grant as Voucher, from Nex-Labs, ENI-CBC-MED project funded by the European Union on commercialization Price.
- **Dr. Dima Mnayer**, received a grant from Agrytech Accelerator Program, Berytech on Novel Food
- **Dr. Myriam Mrad** received a NIH/Fogarty collaborative grant on Environmental Health as co-PI and an IOM/USAID grant on primary health care.
- **Dr. Jessica Saliba** received a grant as a Co-PI from Qatar University, to carry out research on smoking, from molecular and public health standpoints.
- **Dr. Mireille Serhan** appointed by MOPH on the National Food Safety Committee.

ACCREDITATION OF ACADEMIC PROGRAMS

Nursing: The FHS Nursing Program hosted the Accreditation Commission for Education in Nursing (ACEN) candidacy site visit November 28 – December 1, 2022, conducted by Dr Nell Ard and Dr. Suzette Farmer. The visitors had a series of meetings with administrators, UG and GR faculty, students, alumni, and stakeholders, attended classes and sim lab activities and visited some clinical sites. In addition, they reviewed and consulted many documents. ACEN informed FHS and the Nursing Program that the application for candidacy has been granted for both the master's and baccalaureate nursing programs. The candidacy status is valid for two years. The nursing program is working on the self-study, which will be submitted in 2024. The site visit is scheduled for July 2024.

Nutrition: The Department of Nutritional Sciences at the Faculty of Health Sciences has applied to the Accreditation Council for Education in Nutrition and Dietetics (ACEND) to establish an ACEND accredited Nutrition and Dietetics Foreign Dietitian Education Program (FDE) aimed at preparing Registered Dietitian Nutritionists. The eligibility application was accepted by ACEND in June 2023. The Department of Nutritional Sciences is in the pre-candidacy process for the proposed program. Currently, the program is not accepting applications for an ACEND-accredited FDE but plans to do so upon successful completion of the candidacy for accreditation process to. The Nutritional Sciences team is currently preparing the self-study report to be submitted in January 2024. The ACEND accreditors' site visit is scheduled for April 2024.

Public Health: The Public Health Department plans to submit the pre-application for accreditation to the Council on Education for Public Health (CEPH) Fall 2023.

Medical Laboratory Sciences: The MLS Department has selected the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS) for accreditation. The Program Director Eligibility application was submitted but rejected; the department received notification that the MLS director should be board certified. As a result, the application is pending further discussion.

FHS STRATEGIC PLANS

FHS completed its five-year strategic plan 2022-2027 in October 2022.

Strategic plans have been completed by all academic departments, which is a requirement of all accrediting bodies.

All strategic plans include a comprehensive evaluation plan with a timetable to measure, monitor KPIs, and develop action plans accordingly.

INTERNATIONAL ADVISORY BOARD

THE IAB discussed and gave feedback on two proposals; the launch of the Center for Health Research and the preparations to launch an Interdisciplinary PhD program in Health Sciences. Members of the IAB are:

- Antonia Villaruel, Ph.D., Dean of Nursing, University of Pennsylvania, U.S.A. (Chair).
- Rana A. Hajjeh, M.D., Director, Program Management, WHO/EMRO, Cairo, Egypt (Co-Chair).
- Annemie Schols, Dean Faculty of Health, Medicine, and Life Sciences, University of Maastricht, the Netherlands.
- Patricia Davidson, Ph.D., Vice-Chancellor, University of Wollongong, Australia.
- Ellen McKenzie Ph.D., Dean Bloomberg School of Public Health, Johns Hopkins University, U.S.A..
- Richard Calderone, Ph.D., Professor Microbiology, Georgetown University, USA.
- Abraham Goldberg, Ph.D., director, James Madison Center for Civic Engagement, USA.

INTERDISCIPLINARY PH.D. PROGRAM

We believe there will be a strong demand for an interdisciplinary Ph.D. program, driven by the necessity for Lebanese universities to recruit research-active faculty and furnish Lebanon-specific research evidence to guide healthcare practice. An interdisciplinary Ph.D. program in health sciences will help Lebanon retain its top talent by providing advanced research training in the country, thus providing FHS graduates an alternative to enrolling in Ph.D. programs in the US or Europe.

A multidisciplinary and international Ph.D. Steering Committee was appointed:

- Dr. Huda Huijjer (Chair)
- Dr. Mireille Serhan (Co-Chair)
- Dr. Hala Chamieh
- Dr. Mira El Chaar
- Dr. Myriam Mrad
- Dr. Karim Ectay, Faculty of Medicine
- Dr. Jihad Attieh, Faculty of Arts and Sciences
- Dr. Margo Brooks, School of Nursing, University of Pennsylvania, USA.
- Dr. Annemie Schols, Dean Faculty of Health, Medicine, and Life Sciences, University of Maastricht, Netherlands
- Dr. Judy Bass, Bloomberg School of Public Health, Johns Hopkins University, USA.

The PhD proposal was completed, approved by the UOB administration, and submitted to the Ministry of Education and Higher Education (MEHE) for further approval.

FHS SUMMER INSTITUTE 2023

FHS launched, for the third year in a row, its online Summer Institute (SI) under the theme “Interdisciplinary Health Sciences”. Dr. Elias Abdou coordinated the SI 2023.

Four one-credit courses were offered:

- AI in healthcare facilities,
- Fundamental of Tele-Mental health,
- Assisted Reproductive Techniques and In Vitro Fertilization
- Disaster Management and Crisis Response.

All participants are awarded a certificate of attendance

Summer Institute Courses 2023	
Course Title	AI in Healthcare Facilities
Course Code	FHSC 310
Credits	1 credit
Course starting date	June 12, 2023
Course ending	June 16, 2023
Instructor	Dr. Youssef Bassim MD, MS,FACS, MHS And Mr. Ahmad El Rayes –Msc. laboratory Management, UOB and Medical Research Scientist in Medicus AI
Time of the session	M Tu W Th F, 5:00 - 8:00pm
Course description:	<p>This course provides an overview of the use of Artificial Intelligence (AI) techniques and technologies in healthcare. It introduces key AI concepts, such as machine learning, deep learning, natural language processing, and computer vision, and their applications in healthcare. Participants will learn how AI is being used to improve clinical decision-making, patient care, and population health, as well as the ethical, legal, and social issues associated with AI in healthcare. This course is designed for healthcare professionals who want to understand the basic concepts, challenges and opportunities of AI in their respective healthcare systems. The course is also useful for those with relevant skills who have an interest in new professional groups emerging from AI, such as clinical data scientists, medical software engineers, and digital medicine specialists. This course will allow the participants to (1) Understand the key concepts and techniques of AI, and their applications in healthcare. (2) Learn about</p>

the challenges and opportunities of using AI in healthcare. (3) Evaluate the potential benefits and risks of AI in healthcare. (4) Examine the ethical, legal, and social implications of AI in healthcare. (5) Develop critical thinking skills and apply them to analyze case studies and real-world examples of AI in healthcare. (6) Develop practical skills in using AI tools and technologies for healthcare applications.

Summer Institute Courses 2023

Course Title	Fundamentals of Tele-Mental Health
Course Code	FHSC 307
Credits	1 credit
Course starting date	July 03, 2023
Course ending	July 07, 2023
Instructor	Mr. Emile Whaibeh , MPH, Department of Public Health, University of Balamand
Time of the session	M Tu W Th F, 5:00 – 8:00pm

Course description:

Telemental health (TMH), defined as the use of information and telecommunication technologies (ICT) for the remote delivery of mental health and substance use care services, has witnessed exponential growth in recent years. The increased adoption of TMH worldwide can be attributed to multiple factors including (1) increased demand for behavioral health services, (2) increased availability of high-speed internet, (3) decreased cost of ICT, (4) expansion of reimbursement models, and (5) growing scientific evidence demonstrating its effectiveness across various patient populations, psychiatric conditions, and clinical settings. The COVID-19 pandemic further catapulted TMH's expansion and scaling, as social distancing and lockdown measures left clinicians and patients with limited alternatives. Since TMH's effectiveness is well established in the literature and its position in the healthcare system is secured and uncontested, the current public health conversation around it has shifted from "if" to "how" it could be implemented. Introduction to Telemental Health aims to engage graduate students with the fundamentals of TMH and to acquaint them with the current evidence and best practices in the field. The course also acknowledges that despite growing interest in TMH globally and in Lebanon especially, there exist only a few formal educational opportunities for individuals

interested in learning more about it. As such, this course adds significant value to the learning journey of graduate students and healthcare professionals, as it marks the first graduate course focusing on TMH in Lebanon. It prepares learners for the emerging digital shifts in healthcare service delivery, with special considerations for the implementation of TMH in Lebanon and other resource-limited countries in the region and worldwide. The course considers both the clinical and the programmatic aspects, including planning, implementation, and monitoring and evaluation of its essential clinical, technical, legal, and ethical components. The course is largely based on the research and clinical experience of several guest speakers as well as material derived from [Essentials of Telemental Health: A Practical Guide](#), a scientific book published by Springer and co-edited and co-authored by the instructor.

Summer Institute Courses 2023

Course Title	Assisted Reproductive Techniques and In Vitro Fertilization
Course Code	FHSC 303
Credits	1 credit
Course starting date	July 10, 2023
Course ending	July 14, 2023
Instructor	Mrs. Mona Naim : UOB graduate IVF specialist; Mrs. Jessy Kfoury: Senior Laboratory Scientist IVF Centre Saint Georges Hospital, Mrs. Lina Raoub Executive assistant at Saint Georges Hospital
Time of the session	M Tu W Th F, 5:00 - 8:00pm
Course description:	This course is an overview of assisted reproductive techniques covering a review of male and female reproductive anatomy and physiology, the causes of infertility, basic diagnostic tests for assessing the most common causes of infertility, and their interpretation. Treatments discussed include medical therapies, the role of selected surgical procedures, and the various types of ART procedures and their clinical indications including IVF, GIFT, ZIFT, Intra-Cytoplasmic Sperm Injection (ICSI). A review of genetics includes information about preimplantation genetic diagnosis. One section of the course covers cryopreservation that is freezing of gametes and embryos.

Summer Institute Courses 2023

Course Title	Disaster Management and Crisis Response
Course Code	FHSC 305
Credits	1 credit
Course starting date	July 17, 2023
Course ending	July 21, 2023
Instructor	Speakers from Lebanese Army, DRM, Ministry of Public Health, Lebanese Red Cross, World Vision, Khaddet Beirut, and private hospitals.
Time of the session	M Tu W Th F, 5:00 - 8:00pm

Course description:

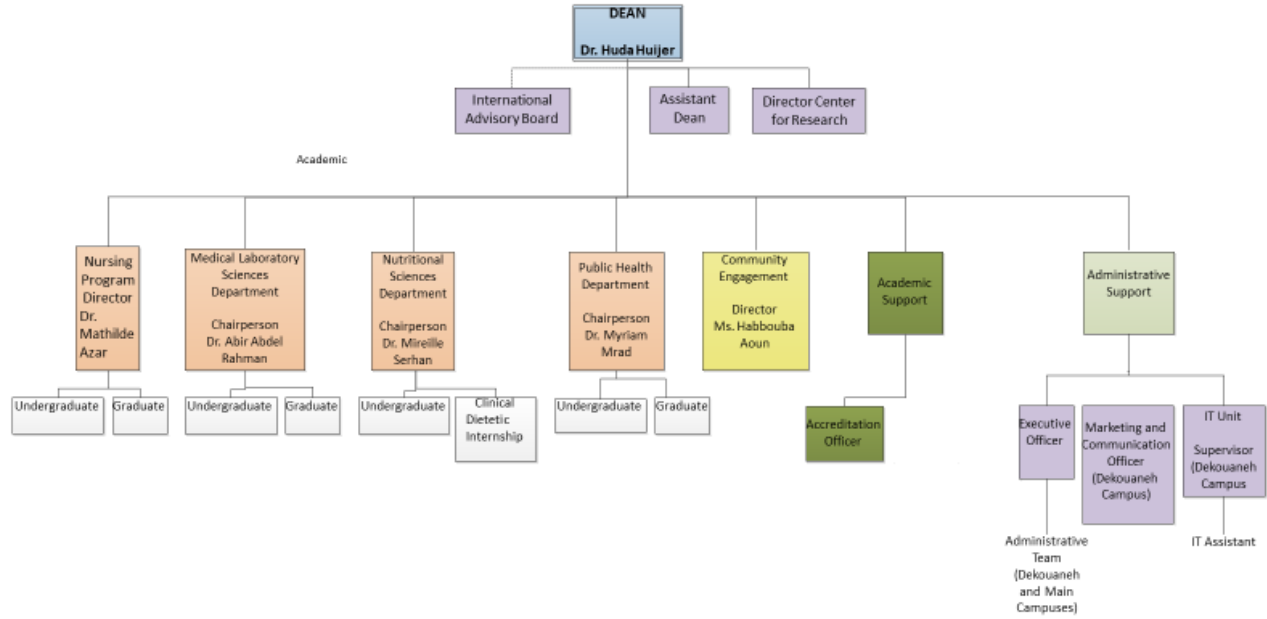
Human-made disasters, natural disasters, infectious diseases, systems, infrastructure, and technology failures are introducing various challenges and negatively impacting people's lives throughout the world. This course helps students learn about the different stages in emergency response, the organizations that deal with emergency response, the role of emergency responders, the need for capacity building, and the role of officials in dealing with such crises. The importance and the different elements of crisis management and response were discussed through different projects, discussions, and lectures. Participants were exposed to the needed skills that help in devising new solutions to different crises by combining different elements of routine response.

FHS NEWSLETTER

- FHS launched its first newsletter September 2021. [Home \(balamand.edu.lb\)](http://www.balamand.edu.lb)
- Newsletter # 2 was launched May 2022. [Home \(balamand.edu.lb\)](http://www.balamand.edu.lb)
- Newsletter # 3 was launched October 2022. [Home \(balamand.edu.lb\)](http://www.balamand.edu.lb)
- Newsletter # 4 <https://www.balamand.edu.lb/faculties/FHS/Newsletter4>
- Newsletter #5 <https://www.balamand.edu.lb/faculties/FHS/Newsletter5>

FHS ORGANIZATIONAL CHART

**UNIVERSITY OF BALAMAND
FACULTY OF HEALTH SCIENCES
ORGANIZATIONAL CHART**



FACULTY ACTIVITIES

ACADEMIC PROGRAMS

NURSING PROGRAM

The Nursing Program offers a Bachelor of Science in Nursing (BSN) in English & French, and a Master of Science in Nursing (MSN) in English in two fields of specialization: Adult Care and Neonatal, and Child Care. It also offers a TS-BSN ladder program that serves as a bridge between technical and university education. The program is competency based and is available across three campuses (Koura, Beirut, and Souk El Gharb).

The Nursing Program works in partnership with Saint George Hospital University Medical Center (SGHUMC) and Mount Lebanon Hospital – University Medical Center. It has also developed MOUs with different experiential learning settings in Beirut, the North, the Chouf region and the Jabal areas, where students can practice at the primary, secondary, and tertiary levels of health care.

Number of current registered students: 162

Number of Alumni: 455

NUTRITIONAL SCIENCES DEPARTMENT

Since its establishment in 2008, the department has emphasized the role of nutrition in promoting the health and well-being of individuals. The Department of Nutritional Sciences at FHS offers a 3-year Undergraduate program leading to a Bachelor of Science: BS in Nutritional Sciences with tracks in “Nutrition and Dietetics” and “Premed”, a Diploma in “Clinical and Dietetics Internship” and a minor in Nutritional Sciences.

Currently, the Department oversees the professional Master’s Program in Food Science and Technology (FSCT) offered at the Faculty of Arts and Sciences, and has prepared a proposal for a graduate program in Nutrition, with tracks in food allergy, pediatric nutrition and sports nutrition. The department has established collaborative research projects with faculty members and researchers in various UOB departments and with other educational institutions in Lebanon and Europe.

The number of current registered students is 60.

Number of Alumni Nutritional Sciences 166

Clinical & Dietetics Internship 110

MEDICAL LABORATORY SCIENCES DEPARTMENT

The Medical Laboratory Sciences Department offers a Bachelor of Science in Medical Laboratory (regular track and pre-med track), and a Master of Science in two fields of specialization: Molecular Biology and Infectious Diseases & Immunology. It also offers a

Professional Master degree in Laboratory Management. Clinical training is conducted at Saint George Hospital Medical University Center (SGHMUC) and Mount Lebanon Hospital (MLH) and other Key hospitals in the country.

The multidisciplinary facets of the program enable students to pursue higher education in various fields, including Clinical Laboratory Sciences, health services administration, epidemiology, and public health. This is evidenced by the high number of students currently enrolled in the program (469), making the MLS department the largest among FHS departments. The exceptionally high acceptance rate of MLS students to medical schools (88%) is one of the program's most significant achievements.

The total number of currently registered students is 469:

Undergraduate 404

Graduate 65

The total number of alumni 915:

BS Medical Laboratory Sciences 817

MS Clinical Laboratory Sciences 63

MS Laboratory Management 35

PUBLIC HEALTH DEPARTMENT

The undergraduate degrees offered by the Public Health Department are recognized in the region for their unique structure, based on the acquisition of solid theoretical knowledge in various Public Health domains and the development of professional and technical skills. Students may select a BS degree in Public Health & Development Sciences; Health Promotion; or follow a Public Health BS degree with a Pre-Med Track. Students may also opt for a dual degree (2 BS Degrees) in both Public Health & Development Sciences and Health Promotion.

The graduate Master of Public Health (MPH) Program prepares students to assume professional roles and be involved in preventing injuries, responding to disasters, encouraging healthier lifestyles, protecting against environmental hazards, contributing to the development of policies, and taking part in important decision-making processes. The MPH Program Department offers 2 tracks: Community Health; and Occupational and Environmental Health.

Total number of current registered students: 138

Number of Alumni: total of 301

Public Health and Development Sciences Program: 263

MPH Program: 38

NEW PROGRAM: HEALTH INFORMATICS POSTGRADUATE CERTIFICATE PROGRAM

FHS has prepared a proposal to launch a Post Graduate Program in Health Informatics. The program introduces students to the fundamentals, infrastructure, roles, and tools of health informatics. It delves into the technology and its applications in healthcare emphasizing both conceptual frameworks and practical applications of health information systems. Students will learn about the core concepts and challenges faced by healthcare professionals in the health sector when planning, implementing, and evaluating information systems.

Objectives

The Post Graduate Program in Health Informatics is designed

- to provide students with the knowledge and skills necessary to take a leadership role in the selection and implementation of health care information management systems, and
- to apply the knowledge gained to drive technology in their health care institutions.

Justification of Need

The lack of certified academic programs benchmarked against leading international institutions justifies the need to launch such a program at the University of Balamand, Faculty of Health Sciences.

The need for Healthcare Informatics certification program has been increasing over the last few years given the following facts:

- The rising importance of health informatics and health information systems for hospital management.
- The need to upgrade the professional competencies and skills of healthcare professionals presently working in various health care institutions.
- The lack of a comprehensive health informatics certification programs offered by expert faculty.

Program Curriculum

This 12 credits program entails five courses, which focus on concepts and issues surrounding technology, and information management in today's rapidly changing health care environment:

- I. Introduction to health informatics (2cr.)
- II. Introduction to Artificial Intelligence (3 cr.)
- III. Applications of healthcare informatics (3 cr.)
- IV. Healthcare IT systems design lifecycle (2 cr.)

V. Challenges and issues related to healthcare IT applications (2 cr.)

Participants who successfully pass the five courses (overall 80% average) will be awarded 'The UOB FHS Certificate in Health Informatics.

The program is housed in the Faculty of Health Sciences. The dean will provide oversight and coordination assisted by FHS faculty and staff. Ms. Hiba Chakhtoura is assigned as coordinator of the program.

Teaching faculty: Ms. Cynthia Abi-Khalil and Dr. Antoine Saab; both specialists in health informatics.

COMMUNITY ENGAGEMENT DEPARTMENT

The Community Engagement Department continues its community development interventions addressing pressing needs related to the Covid-19 pandemic, including risk education and victim assistance, with the support of UNICEF, ITF, and other donors. The department currently has eight funded community projects.

FACULTY TEACHING

MEDICAL LABORATORY SCIENCES DEPARTMENT

Spring 2022-23

COURSE NUMBER	COURSE NAME	CREDITS	TEACHING FACULTY
CLAS308	Biotechnology	3	Bassil, Marcel
CLAS310	Advanced Principles of Immunology	3	Staff
CLAS313	Biomedical Research Techniques	3	Fattouh. Nour
CLAS339	Protein Biochemistry and Proteomics	3	Charafeddine, Adib
CLAS340	Laboratory Quality Management Systems and Accreditation	3	Rabbaa, Sally
CLAS350	Laboratory Management Internship	4	Abdel-Rahman, Abir

CLAS351	Database Management and Laboratory Information Systems	3	Kattar (El), Rabih
CLAS355	Laboratory Marketing Strategies	3	Hokayem(El), Najate
CLAS357	Managing Laboratory Equipment and Set up	3	Abou Haidar, Egnar
CLAS359	Quality Control in Industries	3	Saliba, Katia
CLAS399	Master's Thesis	6	Haddad, Lara; Chaar, Mira; Abdou, Elias . Abdel Rahman, Abir
MLAB211	Clinical Chemistry I	3	Chamieh, Hala
MLAB214	Basic and Clinical Immunology	3	Harmoush, Chaza; Abou Hassan, Farouk; Haddad, Lara
MLAB215	Basic and Clinical Hematology	4	Greige, Layal/ Karam, Louna /Tohme, Jessy
MLAB221	Clinical Chemistry II	3	Greige, Layal/Hamade, Eva/Melki, Pamela
MLAB223	Clinical Bacteriology	3	Bayssari(Al), Charbel/Abdo, Elias / Chaar, Mira
MLAB224	Medical Parasitology and Mycology	2	Bayssari(Al), Charbel/Chaar, Mira
MLAB225	Clinical Bacteriology Laboratory	1	Bayssari(Al), Charbel/Abdo, Elias / Hajj, Raymond/Hajjar, Michleine/Mardirossian, Jean Marc
MLAB226	Histotechnology Applications	2	Meguerian, Zarouhie/Choueiry, Camille/Gemayel, Christine
MLAB230	Molecular Biology	3	Harmoush, Chaza/Chamieh, Hala
MLAB232	Medical Virology	2	Chaar(El), Mira
MLAB233	Toxicology	2	Dassouki, Zeina/Hamade, Eva/Melki, Pamela

MLAB249	Phlebotomy, Blood Bank and Transfusion Medicine	2	Dib, Liza/Dassouki, Zeina/AbdelRahman Abir/Tohme, Jessy
MLAB251-8	Applied Clinical Chemistry	1	Greige, Layal/Abou Lteif, Ghada/ Badran, Ghandoura/Broumana, Jessy
MLAB260	Advanced Topics in Quality Assurance	1	Abdel-Rahman, Abeer/Habib, Abdo
MLAB350	Advanced Clinical Practicum	4	Greige, Layal/Abou Lteif, Ghada/ AbdelRahman, Abir
CLAS308	Biotechnology	3	Bassil, Marcel
CLAS310	Advanced Principles of Immunology	3	Staff
FHSC203	Basic Human Physiology	4	Harmoush, Chaza/Damaj, Raghida/Haddad, Lara/ Moussa, Mayssam
FHSC204	Principles of Genetics	2	Damaj, Raghida/Moussa, Mayssam
FHSC208	Cell Biology	3	Haddad, Lara
FHSC268	Fundamentals of Management and Marketing	3	Ismail, Zouhair

Summer 2022-23

COURSE NUMBER	COURSE NAME	CREDITS	TEACHING FACULTY
CLAS350	Laboratory Management Internship	4	Rabbah, Sally
CLAS371	Introduction to Forensics	3	Khatib, Jinan
FHSC203	Basic Human Physiology	4	Moussa, Mayssam
FHSC204	Principles of Genetics	2	Isber, Christina/ Damaj, Raghida/Moussa, Mayssam
FHSC268	Fundamentals of Management and Marketing	3	Ismail, Zouhair

MLAB214	Basic and Clinical Immunology	3	Haddad, Lara
MLAB223	Clinical Bacteriology	3	Chaar(El), Mira
MLAB224	Medical Parasitology and Mycology	2	Chaar(El), Mira
MLAB225	Clinical Bacteriology Laboratory	1	Hajjar Micheline/Hajj Raymond
MLAB226	Histotechnology Applications	2	Meguerian, Zarouhie/Choueiry, Camille
MLAB230	Molecular Biology	3	Chamieh, Hala/Soayfane, Zeina
MLAB233	Toxicology	2	Dassouki, Zeina/Hamade, Eva
MLAB251-8	Applied Clinical Chemistry	1	Greige, Layal/Mardirossian, Jean Marc
MLAB350	Advanced Clinical Practicum	4	Abdel-Rahman, Abeer

Fall 2023-2024

COURSE NUMBER	COURSE NAME	CREDITS	TEACHING FACULTY
CLAS301	Laboratory Organization, Management, and Quality Assurance	3	Rabbaa, Sally
CLAS304	Research Methods	3	AbdelRahman, Abir
CLAS310	Advanced Principles of Immunology	3	Haddad, Lara
CLAS312	Epidemiology and Biostatistics	3	Omari, Sara
CLAS320	Cellular and Molecular Biology	3	Chamieh, Hala/Harmoush, Shaza
CLAS336	Genomics	3	Zein, Nabil
CLAS346	Laboratory Financial Management	3	Hokayem, Jihad
CLAS350	Laboratory Management Internship	4	AbdelRahman, Abir
CLAS353	Laboratory Human Resource Management	3	Chebaya, Mariam

CLAS360	Research Methodologies and Biostatistics	3	AbdelRahman, Abir
CLAS399	Master's Thesis	6	AbdelRahman, Abir
FHSC203	Basic Human Physiology	4	Haddad, Lara / Dasouki, Zeina / Damaj, Raghida
FHSC204	Principles of Genetics	2	Chamieh, Hala
FHSC268	Fundamentals of Management and Marketing	3	Zouheir, Ismail
MLAB211	Clinical Chemistry I	3	Chamieh, Hala / Accary, Claudine / Hmadeh, Eva
MLAB213	General Microbiology	3	Bayssari, Charbel / Abdo, Elias / Chaar, Mira
MLAB214	Basic and Clinical Immunology	3	Ghotmi, Nadine / Trad, Rim / Zein, Nabil
MLAB215	Basic and Clinical Hematology	4	Youssef, Lara
MLAB221	Clinical Chemistry II	3	Hmadeh, Eva
MLAB223	Clinical Bacteriology	3	Chaar, Mira
MLAB224	Medical Parasitology and Mycology	2	Chaar, Mira
MLAB226	Histotechnology Applications	2	Greige, Layal
MLAB230	Molecular Biology	3	Abou Lteif, Ghada
MLAB232	Medical Virology	2	Chaar, Mira
MLAB233	Toxicology	2	Dassouki, Zeina
MLAB249	Phlebotomy, Blood Bank and Transfusion Medicine	2	Tohme, Jessy
MLAB251-8	Clinical		Greige, Layal / Tohme, Jessy / Marj, Ghada
MLAB260	Advanced Topics in Quality Assurance	1	Tohme, Jessy
MLAB350	Advanced Clinical Practicum	4	Tohme, Jessy

NURSING PROGRAM

Spring 2022-23

COURSE NUMBER	COURSE NAME	CREDITS	TEACHING FACULTY
FHSC209	Fundamentals of Microbiology	2	Bayssari(AI), Charbel/Abdo Elias/Micheline Hajjar
FHSC271	First Aid	1	Red Cross Team
NURS211	Introduction to Nursing Practice	4	Germanos, Peggy/Georges Vicky/Habib Hiba
NURS242	Nursing Care of Adults II	5	Bassila, Joelle/Georges Vicky/Habib Hiba/AbdelKarim Carole
NURS244	Nursing Care of Children	5	Germanos, Peggy/Azar Mathilde
NURS245	Nursing Care of the Elderly	2	Bassila, Joelle/Said Manal/Assaad Najibeh
NURS246	Mental Health and Psychiatric Nursing	4	Kfoury Hadchity, Darine/Chamoun, Marianne
NURS250	Leadership and Management in Nursing and Health	5	Bassila, Joelle/Azar Mathilde/Bassila Joelle/Hourany Rabab/Habib Hiba
NURS251	Internship	10	Habib, Hiba/Azar, Mathild
NURS302	Advanced Pediatric Pharmacology and Therapeutics in Nursing	2	Alaaeddine, Nada/ Sabbagh, Racha
NURS304	Management of Children with Acute & Chronic Conditions	3	Abdallah, Bahi/Azar, Mathild/Badr, Lina Noun, Peter/ Dano, Dominique/Matta, Judi
NURS312	Advanced Adult Pharmacology and Therapeutics in Nursing	2	Alaaeddine, Nada/ Sabbagh, Racha
FHSC209	Fundamentals of Microbiology	2	Bayssari(AI), Charbel/Abdo Elias/ Hajjar, Micheline

Summer 2022-2023

COURSE NUMBER	COURSE NAME	CREDITS	TEACHING FACULTY
<u>NURS212</u>	Legislation and Nursing	1	Chalhoub, Jessica/Ismael, Suzanne
<u>NURS214</u>	Service Training I	2	Habib, Hiba
<u>NURS215</u>	Service Training II	2	Habib, Hiba
<u>NURS216</u>	Health Assessment	2	Hourany, Rabab/Georges, Vicky/Habib, Hiba
<u>NURS246</u>	Mental Health and Psychiatric Nursing	4	Hadda, Yara / Tami, Rabih / Hadchity, Darine
<u>NURS305</u>	Clinical Decision Making and Management in Neonatal and Child Care I	4	Azar, Mathilde
<u>NURS306</u>	Clinical Decision Making and Management in Neonatal and Child Care II	4	Azar, Mathilde
<u>NURS315</u>	Clinical Decision Making and Management in Adult Care I	4	Azar, Mathilde
<u>NURS316</u>	Clinical Decision Making and Management in Adult Care II	4	Azar, Mathilde
<u>NURS399</u>	Master's Thesis	6	Azar, Mathilde

Fall 2023-24

COURSE NUMBER	COURSE NAME	CREDITS	TEACHING FACULTY
FHSC202	Introduction to Human Anatomy	2	Nabbout, Ghassan/ Kalalsy, Lea
FHSC211	Pathophysiology	3	Klayme, Rita/Kallasy, Lea / Habib, Hiba

FHSC229	Pharmacology	2	Dernaika, Fouad/ Masri, Nancy / Tamim, Rabih
FHSC271	First Aid	1	Red Cross team
FHSC280	Information Technology and Health Sciences	2	Jreije, Jocelyne/ Haddad, Samir / Habib, Hiba
FHSC282	Principles of Epidemiology and Biostatistics	3	Harb, Frederic Gregory Joseph/ Jurdi, Saada / Saliba, Jessica
FHSC288	Research in Health Care Sciences	3	Hamouch, Chaza / AbdelRahman, Abir / Azar, Mathilde
NURS210	Introduction to Professional Nursing	2	Finianos, Jessica/ Hourany, Rabab / Habib, Hiba
NURS241	Nursing Care of Adults I	5	Germanos, Peggy/ Hourany, Rabab / Habib, Hiba
NURS247	Nursing Care in Perinatology and Gynecology	4	Germanos, Peggy/ Azar, Mathilde
NURS248	Nursing Care of Adults in Critical Condition	4	Habib, Hiba/ AbdelKarim, Carole / georges, Vicky
NURS249	Nursing in the Community	5	Finianos, Jessica/ Hourany, Rabab / George, Vicky
NURS307	Management of High-Risk Neonate within a Family Centered Approach	3	Ghadieh, Joelle
NURS311	Advanced Physiology and Pathophysiology in Adult Care	3	Kleimeh, Nelly
NURS313	Advanced Health Assessment of the Adult	2	Finianos, Jessica
NURS398	Project	3	Azar, Mathilde
NURS399	Master's Thesis	6	Azar, Mathilde

NUTRITIONAL SCIENCES DEPARTMENT

Spring 2022-23

COURSE NUMBER	COURSE NAME	CREDITS	TEACHING FACULTY
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<u>NUSC200</u>	Basic Human Nutrition	3	Rouaiheb (El), Hiba
<u>NUSC202</u>	Lifecycle Nutrition	3	Rouaiheb (El), Hiba
<u>NUSC211</u>	Nutrition Counseling and Communication	3	Rizk, Maud/ Dano, Dominique
<u>NUSC214</u>	Therapeutic Nutrition II	3	Zgheib, Georges/ Dano, Domnique
<u>NUSC215</u>	Therapeutic Nutrition II Lab.	1	Dano, Dominique
<u>NUSC220</u>	Community Nutrition I	3	Rouaiheb (El), Hiba/ Karam, Joanne
<u>NUSC239</u>	Applied Food Analysis	3	Serhan, Mireille
<u>NUSC241</u>	Special Topics in Nutrition and Food	2	Rouaiheb (El), Hiba/Deghel, Maria/ Karam, Joanne
<u>NUSC300B</u>	Practicum II	15	Karam, Joanne
<u>NUSC302</u>	Seminars in Clinical Dietetics II	3	Karam, Joanne

Summer 2022-2023

COURSE NUMBER	COURSE NAME	CREDITS	TEACHING FACULTY
NUSC200	Basic Human Nutrition	3	Rouaiheb (El), Hiba

Fall 2023-2024

COURSE NUMBER	COURSE NAME	CREDITS	TEACHING FACULTY
NUSC201	Human Nutrition and Metabolism	3	Rouaiheb (El), Hiba/ Daher, Mira
NUSC203	Food Microbiology	3	Deghel, Maria/Assaad, Chafica
NUSC204	Food Chemistry	3	Obeid, Pierre Joseph
NUSC208	Public Health Nutrition and Food Hygiene	3	Rouaiheb (El), Hiba/Mnayer, Dima
NUSC210	Food Service Management	3	Serhan, Mireille
NUSC212	Therapeutic Nutrition I	3	Rizk, Maud

NUSC213	Therapeutic Nutrition I Lab.	1	Rizk, Maud
NUSC240	Applied Food Processing	3	Serhan, Mireille/ Mnayer, Dima
NUSC300A	Practicum I	15	Serhan, Mireille
NUSC300A	Practicum I	15	Serhan, Mireille
NUSC301	Seminars in Clinical Dietetics I	3	Daher, Mira

PUBLIC HEALTH DEPARTMENT

Spring 2022-2023

COURSE	COURSE NAME	CREDITS	TEACHING FACULTY
<u>MPHP306</u>	Basic Theories of Health Promotion	3	Dano, Dominique
<u>MPHP308</u>	Public Health Ethics	1	Abbas, Nivine
<u>MPHP309</u>	Public Health Policy, Law and Advocacy	2	Hatjian, Berj/Naddaf, Youssef
<u>MPHP310</u>	Occupational Toxicology and Risk Assessment	3	Mrad, Myriam
<u>MPHP312</u>	Health Services and Management	3	Abdo, Habib
<u>MPHP316</u>	Community Health Assessment	3	Staff
<u>MPHP317</u>	Community Program Planning, Implementation, Monitoring and Evaluation	3	Staff
<u>MPHP319</u>	Occupational Well-Being, Health, Hygiene, and Safety	3	Hatjian, Berj
<u>MPHP320</u>	Selected Topics in Community Health	3	Abbas, Nivine
<u>MPHP321</u>	HSE Management Principles and Methods	3	Khalifeh, Nassab
<u>MPHP322</u>	Emergency Management of Accidents and Incidents Investigations	3	Khalil, Samar
<u>MPHP341</u>	Practicum I	3	Mrad, Myriam
<u>MPHP342</u>	Practicum for MDs	2	Abi Hanna, Jowy

<u>MPHP350</u>	Practicum II	3	Abi Hanna, Jowy/Whaibeh, Emile/Saliba, Jessica/Abbas, Nivine/Karam Joanna
<u>PDHP200</u>	Microbiology for Health Sciences	3	Bayssari(Al), Charbel/Abdo, Elias/Hajjar, Micheline
<u>PDHP201</u>	Environment, Health, and Development	3	Whaibeh, Emile
<u>PDHP218</u>	Principles of Health Promotion I	3	Jaalouk, Lina
<u>PDHP224</u>	Gender and Development	3	Abbas, Nivine
<u>PDHP227</u>	Occupational Health and Hygiene	3	Mrad, Myriam/Hatjian, Berj
<u>PDHP245</u>	Issues in Community Health and Development	3	Naddaf, Youssef
<u>PDHP247</u>	Economics in Environment, Health, and Development	3	Daccache, Caroline
<u>PDHP248</u>	Quality Management Systems	2	Mrad, Myriam

Summer 2022-2023

COURSE NUMBER	COURSE NAME	CREDITS	TEACHING FACULTY
<u>MPHP341</u>	Practicum I	3	Saliba, Jessica
<u>MPHP342</u>	Practicum for MDs	2	Mrad, Myriam/Abi Hanna, Jowy
<u>MPHP350</u>	Practicum II	3	Mrad, Myriam/Saliba, Jessica/Whaibeh, Emile/Jaalouk, Lina/Abbas, Nivine
<u>PDHP260</u>	Student Project Residency Internship	3	Abi Hanna, Jowy

Fall 2023-2024

COURSE NUMBER	COURSE NAME	CREDITS	TEACHING FACULTY
FHSC269	Health Care Management and Administration	3	Nemer, Denise

MPHP301	Biostatistics	3	Staff
MPHP302	Epidemiology	3	Saliba, Jessica
MPHP303	Environmental Health Sciences	3	Mrad, Myriam
MPHP308	Public Health Ethics	1	Abbas, Nivine
MPHP309	Public Health Policy, Law and Advocacy	2	Hatjian, Berj
MPHP315	Research Design	3	Saliba, Jessica
MPHP341	Practicum I	3	Saliba, Jessica
MPHP350	Practicum II	3	Mrad, Myriam
PDHP214	Family Health	3	Jaalouk, Lina/Saada Jurdi/Sabine AbdelSater
PDHP219	Introduction to Public Health	3	Jaalouk, Lina
PDHP226	Sanitation and Resource Management for Public Health	3	Whaibeh, Emile/Myriam Mrad
PDHP229	Epidemiology in Public Health Practice	3	Jurdi(EI), Saada/Jowy Abi Hanna
PDHP231	Public Administration and Policy in Lebanon	3	Abbas, Nivine/Youssef Naddaf
PDHP237	Public Health Communications in the Arab World	3	Jaalouk, Lina
PDHP238	Environmental Management in Public Health Practice	3	Whaibeh, Emile/Berj Hatjian
PDHP242	Public Health and Urban Environment	3	Abbas, Nivine
PDHP249	Toxicology and Human Health Risk Assessment	3	Whaibeh, Emile/Myriam Mrad

STUDENTS THESES AND PROJECTS

NAME	DEFENSE DATE	PROJECT OR THESIS	PROJECT TITLE	PROJECT/THESIS COMMITTEE
Issa Al Fata	22 February, 2023	Project	Hand hygiene in the intensive care unit: audit and intervention	Emile Whaibeh, Nivine Abbas, Myriam Mrad
Amani Yehia	6 May, 2023	thesis	Psychosocial support for older adults in their community	Nivine Abbas, Jessica Saliba, Myriam Mrad
Jaafar Zeineddine	6 May, 2023	Project	Smoking prevention for secondary high school students in Borj Al-Barajinah	Jessica Saliba, Nivine Abbas, Myriam Mrad
Mira Fayad	6 May, 2023	Project	Women's health in a primary healthcare center at Makhzoumi	Jessica Saliba, Nivine Abbas, Myriam Mrad
Michella Chahine	6 May, 2023	Project	Hypertension awareness session material preparation and knowledge assessment	Jessica Saliba, Nivine Abbas, Myriam Mrad
Najia Helmi	6 May, 2023	Thesis	Assessing the occupational hazards in a perfume trading company	Emile Whaibeh, Nivine Abbas, Myriam Mrad

Pamela Salem	6 May, 2023	Project	Design and evaluation of awareness sessions on cholera and bacterial infections for caritas youth	Nivine Abbas, Jessica Saliba, Myriam Mrad
Rayan Mohamad Hamza	6 May, 2023	Project	Internship : health awareness materials developer for health awareness sessions at Amel association PHCCS and MMUS	Nivine Abbas, Jessica Saliba, Myriam Mrad
Tamara Bou Ghader	6 May, 2023	Thesis	Rural assessment for food security and agricultural needs in Akkar, Lebanon resulting from the economic crisis and climate change	Emile Whaibeh, Nivine Abbas, Myriam Mrad
Dana Baghdady	6 May, 2023	Project	Awareness sessions for nursing students regarding most common mental health issues and the coping mechanisms among nurses in Lebanon	Jessica Saliba, Nivine Abbas, Myriam Mrad
Claudia Abi Raji	10 May, 2023	Project	Needs assessment, community work and database management : Flamme de Charité	Myriam Mrad Nakhle, Jessica Saliba, Nivine Abbas
Corelle Wehbe	11 May, 2023	Project	Fire safety and emergency planning in a school setting	Emile Whaibeh, Nivine Abbas, Myriam Mrad

Mohamad Hadi El Charif	24 May, 2023	Project	The evolution and monitoring of infection control methods for COVID-19 at AUBMC and its impact on HCWs' practices	Jessica Saliba, Nivine Abbas, Myriam Mrad
Lilian Alrayes	30 May, 2023	Project	Ethical policies in the workplace	Jessica Saliba, Nivine Abbas, Myriam Mrad
Nesrine El Khansa	31 May, 2023	Project	Understanding diabetes : awareness campaign	Lina Jaalouk, Jessica Saliba, Myriam Mrad
Sahar Kamel	5 June, 2023	Project	Nurses' knowledge and skills assessment related to central line bloodstream infection prevention : a pilot study at SGHUMC	Nivine Abbas, Jessica Saliba, Myriam Mrad
Serena Khalil	June 5, 2023	Project	Remote project revitalizing medical and health service offering via telehealth : developing guidelines that the Ordre de Malte primary healthcare centers can use to conduct telehealth	Emile Whaibeh, Jessica Saliba, Myriam Mrad

Fatima Alzahraa Khazem	27 July, 2023	Project	Assessing nutrition and non-communicable disease care at international medical corps supported primary healthcare centers in Lebanon	Jessica Saliba, Nivine Abbas, Myriam Mrad
Jihane Bou Samra	July 31, 2023	Project	Improving public health preparedness to COVID-19 and future emergencies in Lebanon : integrating a program for community health workers in primary health care	Jessica Saliba, Nivine Abbas, Myriam Mrad
Lama Siblani	July 27, 2023	Project	Evaluation of outbreak preparedness of nurses in a tertiary care Bekaa hospital	Jessica Saliba, Emile Whaibeh, Myriam Mrad
Rana Bou Said	27 July 2023	Project	Support the implementation of Saqirh project in Karm Zaitoun and Ain El Remmaneh centers	Nivine Abbas, Jessica Saliba, Myriam Mrad

STUDENT-RELATED ACTIVITIES

STUDENT ENROLLMENT

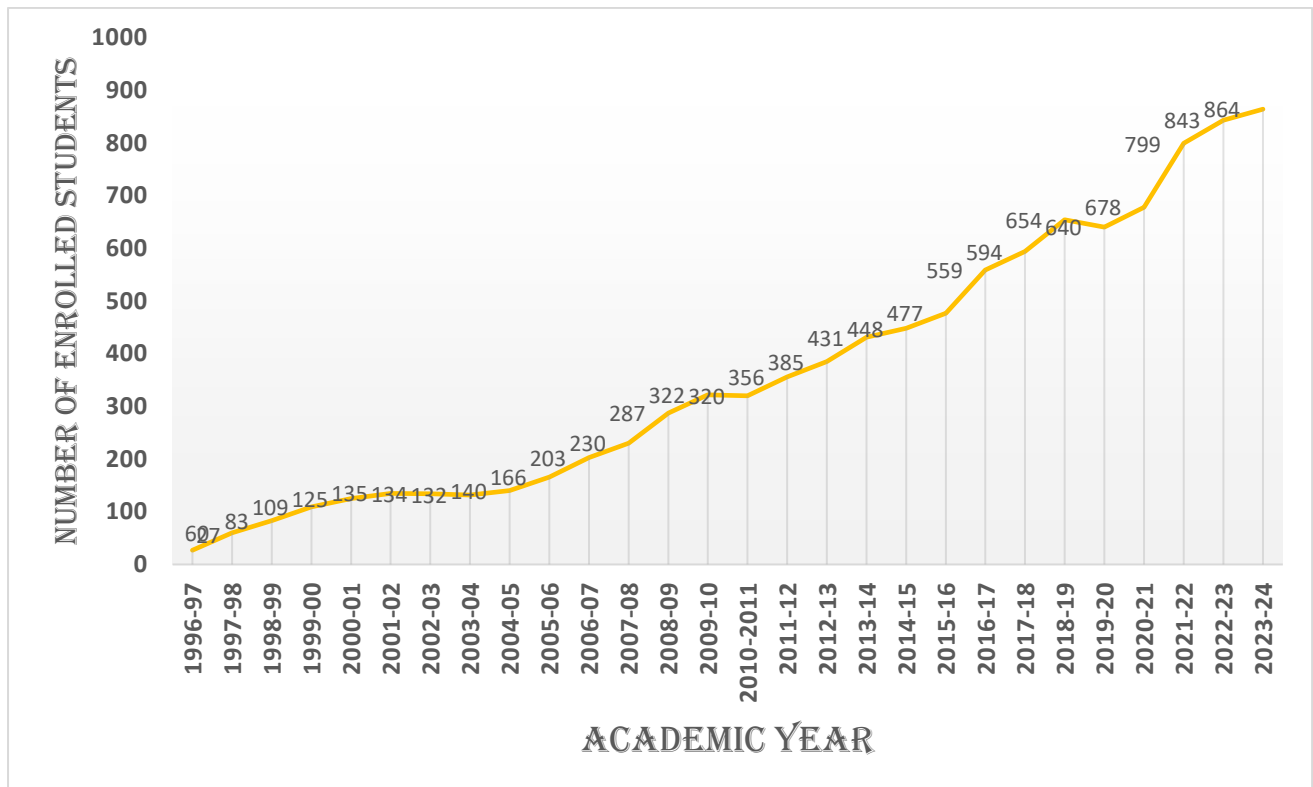
Table 1: FHS enrolment statistics in the last 6 years

FHS STUDENT ENROLLMENT 2023-2024

	Fall 2017-18		Fall 2018-19		Fall 2019-20		Fall 2020-21		Fall 2021-22		Fall 2022-23		Fall 2023-24	
Applications	437		452		411		471		778		982		786	
Accepted Applications	271		284		212		270		374		463		605	
Newly enrolled	188		201		161		218		254		282		219	
Overall enrolled	594		654		640		678		799		843		864	
Yield	69.37%		70.77%		75.94%		80.74%		67.91%		60.91%		36.20%	
International Students	6.57%		5.20%		5.47%		6.05%		5.65%		6.98%		7.29%	
Gender	F	M	F	M	F	M	F	M	F	M	F	M	F	M
% Gender	72%	28%	72%	28%	72%	28%	70%	30%	71%	29%	74%	26%	74%	26%

1
2
3

Figure 1: FHS Students' Enrollment Trend in the past 25 years



MAJOR	Fall 22-23	Spring 22-23	Summer 2023	Fall 23-24
BS - Nursing	123	124	96	116
BS - Nursing - F	21	21		12
BS - Nutritional Sciences	41	45	22	41
BS - Medical Laboratory Sciences	404	425	268	465
BS - Public Health and Development Sciences	71	73	45	79
MS - Nursing	18	20	15	20
MS - Clinical Laboratory Sciences	41	43	5	36
MS - Clinical Laboratory Sciences (Lab Management)	28	20	5	22
Master - Public Health	67	58	16	38
Clinical and Dietetics Internship	10	10		10
FHS - Majorless	4	3	1	9
SOP - SOP Health Sciences	5	2	1	7
PMED - Premedical Program - Dekouaneh	15	11		10

FS - Freshman Sciences -Al Kurah	1			
TOTAL	849	855	474	864

CAMPUS	Fall 22-23	Spring 22-23	Summer 2023	Fall 23-24
Balamand - Al Kurah	225	233	129	262
Dekouaneh	492	482	255	469
Souk Al Gharb - Aley	132	140	90	133

STUDENT RECRUITMENT AND MARKETING

The Faculty of Health Sciences at the of University of Balamand is committed to the principles of tolerance and compassion and is therefore dedicated to graduating health care professionals who are well-rounded, critical thinkers and life-long learners. As a result, the faculty played an important role in the university wide recruitment process. Dr. Abir Abdel-Rahman, a founding member of the recruitment office, led the orientation activities at FHS. Faculty and staff from various departments and programs at FHS were also involved in the recruitment process. The FHS team provided precise instructions, proper orientation and optimal guidance for high school students interested in joining UOB and majoring in the Heath care field. FHS participated in all orientation activities scheduled with schools in different geographical areas, as follows:

It is important to note that around 90% of newly enrolled students come from schools targeted by the FHS orientation team.

In addition, FHS participated in events in the MENA region, mainly in KSA, UAE and Jordan.

The involvement in recruitment activities was not restricted to the participation in joined undertakings with schools or institutions of higher education. FHS also organized orientation webinars at the undergraduate and graduate levels. The majority of candidates who attended the webinars applied to one of the FHS majors and registered in different programs.

Despite the challenges posed by the social uprising in 2019, the Covid-19 pandemic, and the economic crisis, FHS has seen an increase in the number of applicants.

RESEARCH AND SCHOLARLY ACTIVITIES

CENTER FOR HEALTH RESEARCH (CHR)

The Faculty of Health Sciences, embarked on an exciting new venture in September 2022 with the launch of the Center for Health Research. This center was established with the primary goal of advancing and enhancing research activities within the faculty, fostering a collaborative and informed community, and promoting capacity building among students and faculty. The center serves as a hub of knowledge and expertise, aiming to boost the Faculty of Health Sciences to new heights in research excellence.

The Center for Health Research aims to facilitate interdisciplinary research collaboration, encouraging faculty members to share their latest research findings and insights with their colleagues through the "Lecture Series". These engaging lectures create a platform for faculty to delve into diverse topics, exchange knowledge, and generate valuable discussions that enrich the collective understanding within the Faculty.

Secondly, the center recognizes the importance of international perspectives and expertise in the field of research. To this end, it organizes the "Methodology Corner," a lecture series where national and international renowned experts are invited to share their insights on various research-related topics. These sessions serve as valuable learning opportunities for students and faculty alike, enabling them to gain exposure to cutting-edge methodologies and best practices.

Lecture Series and Methodology Corners: In line with its commitment to advancing health sciences research, the center has conducted several compelling lectures under the "Lecture Series" and "Methodology Corner". These sessions featured speakers who explored a diverse array of topics relevant to the field.

TITLE	PRESENTED BY	DATE
Regulation of the setting up of Brucella suis persistence by RegBA	Dr. Elias Abdo	February 28, 2023
Understanding biostatistics in published articles	Dr. Ziad Mahfoud University of Qatar	March 20, 2023
Engineering microbial cell factories for the production of novel industrial biotechnological products	Dr. Hala Chamiyeh	March 28, 2023
Research: From initiation to publication	Dr. Hani Tamim AUB	March 30, 2023
Grant Management Process	Mrs. Joelle Khoury	April 4, 2023

Carbapenem and Colistin Resistance in Lebanon: Epidemiological Data and New Molecular Diagnostic Tool	Dr. Charbel Baysari	April 25, 2023
Prevalence of Food Allergy among Schoolchildren in Lebanon	Dr. Dominique Dano	May 2, 2023
Impacting Policy, Patient Outcomes & Health Equity Through Nursing Outcomes Research	Dr. Margo Brooks Carthon University of Pennsylvania	May 11, 2023
Physicians' perceptions and preferences for implementing Venous Thromboembolism (VTE) Clinical Practice Guidelines	Dr. Abir Abdel Rahman	May 30, 2023
Novel Therapeutic Approaches in Malignant Diseases	Dr. Zeina Dasouki	October 31, 2023
Smoking: An Old Trouble with New Challenges. Research at the FHS	Dr. Jessica Saliba	November 7, 2023
Appraisal, Burnout and Coping in Dyads Living with a Chronic Illness	Dr. Angela Massouh AUB	November 14, 2023
Systematic Review Methodology	Dr. Elie Akl AUB	November 23, 2023
Randomized Clinical Trials: Important Design and Analysis Concepts	Dr Ziad Mahfoud University of Qatar	November 30, 2023

FHS Funding: FHS has attracted support from a number of external funders including NIH, IOM, WHO, the Ministry of Health, the Lebanese National Council for Scientific Research (LNCSR), Pfizer Pharmaceuticals, UOB Research Board (URB), the Order of Nurses in Lebanon, UNICEF, UNDP, Investigator start-up funds, University of Maryland, Dubai Health Authority (DHA), USJ Research Fund, and seed money. A number of research projects were recently completed, and many undertaken jointly with researchers from other disciplines.

GEOHealth Hub on Climate Change and Health in the Middle East and North Africa is the fruitful outcome of a national, regional, and international faculty collaboration. Funded by the National Institutes for Health, the GEOHealth Hub is one of seven Global Environmental and Occupational Health hubs dedicated to high priority health research, data management, curriculum and material development, training activities, and policy support. This program is an international consortium focused on climate change and its impact on health. The University of Balamand, the Jordan University of Science and Technology – JUST, the Mohamed VI University for Health Sciences, the Harvard School of Public Health Center for Environmental Health, the University of California San Diego, the University of California Berkeley, along with the U.S. Center for Disease Control and Prevention, and WHO's Center for Environmental Health Action (CEHA) partnered to

address the impacts of climate change on health, water, and air pollution and identify gaps and areas of development in environmental and public health through research, training, and capacity building.

The University of Balamand's program is led by Dr. Myriam Mrad, consortium, and country principal investigator. Dr. Myriam Mrad and her multidisciplinary team are working on various projects under the GEOHealth Hub such as the impact of air pollution on respiratory, cardiovascular, and skin allergic diseases health outcomes in Beirut, Lebanon among vulnerable groups, the effects on environmental exposures on Lebanese pregnant women and infants, and healthcare system's resilience to climate change.

The 2nd GEOHealth hub for climate change and health in the MENA conference and workshops

The University of Balamand organized the second GEOHealth Hub on climate change and health in the MENA region training and conference this year. From June 19 to June 27, 2023, training and workshops were offered to students. More than 20 students from institutions such as the Jordan University of Science and Technology - JUST, the Mohamed VI University for Health Sciences, and the University of Balamand attended the sessions.

During each one-day workshop, a comprehensive exploration of diverse topics focused on the impact of air pollution on human health was undertaken. The sessions delved into the details of Environmental Toxicology, offering insights into the impact of toxicants on human health. Causal inference and direct acyclic diagrams were dissected, providing a deep understanding of causation models. GIS and Vulnerability assessment took center stage, demonstrating the pivotal role of Geographic Information Systems in evaluating and addressing vulnerabilities. The first part of the Air Pollution workshop shed light on the sources and consequences of air pollutants. The nexus between climate-resilient healthcare systems and human health risk assessment tools was explored, emphasizing the importance of adapting healthcare practices to a changing climate. Participants engaged in a practical session on Timeseries Analysis for Air Pollution Mortality using the R software, enhancing their analytical skills. The second part of the Air Pollution workshop continued the discourse on this critical environmental concern. Finally, the workshop series concluded with an exploration of Cost-effectiveness, providing valuable insights into the economic considerations of environmental and public health interventions. Renowned experts from regional and international universities and entities led the workshops, generously sharing their expertise and valuable insights with the participants.

On June 22, 2023, the University of Balamand proudly hosted the second annual GEOHealth Hub conference on Climate Change and Health in the MENA region at the Nahyan Auditorium in Koura Campus, Lebanon. This distinguished event brought together renowned international and regional experts, delivering invaluable insights and knowledge. Over 150 experts, researchers, instructors, students, and staff from various regional and national entities attended the conference. The conference began with warm opening

remarks from distinguished individuals, including Principal Investigators from GEOHUB, deans, and ministers. Subsequently, the conference delved into keynote presentations by experts in their respective fields. The event provided a platform for numerous oral presentations, allowing experts to shed light on crucial topics related to climate change and health. Additionally, it offered a dedicated session for junior researchers from different countries to present their work. The conference concluded with an award distribution for the best student oral presentations. Participants left the event inspired and armed with valuable insights to address the challenges posed by climate change and its impact on health in the MENA region.

The GEOHealth hub PI team participated in the COP28 in UAE

The GEOHealth hub PI team, including Dr. Wael Al-Delaimy, Dr. Myriam Mrad, Dr. Fayez Abdullah, and Dr. Kanz Khomsi, actively participated in COP28 held in the UAE from November 30 to December 12. This annual gathering brings leaders from around the world to address the dangerous human interference with the climate system. Team members contributed based on their background and work within the GeoHealthHub.

In conclusion, with the Center for Health Research in place, the Faculty of Health Sciences at the University of Balamand is poised to accelerate its research efforts, foster academic growth, and contribute significantly to the advancement of health sciences in Lebanon and beyond. The center's commitment to collaboration, capacity building, and excellence in research sets the stage for a promising future of continuous discovery and innovation in the field of health sciences.

FHS RESEARCH PROJECTS

Principal Investigator: Huda Abu-Saad Huijer

Palliative Care in Older Adults in Lebanon

The purpose of this study is to evaluate the quality of palliative care (PC), the quality of life (QoL), symptom management, and functional ability among hospitalized older adults in need of palliative care in Lebanon.

Co-investigators: Souha Fares, Silva Dakessian, Joelle Bassil

Funding: CNRS

Status: Completed. Last article received Outstanding Article of the Year

Principal Investigator: Nivine Abbas

Parental perceptions and childhood obesity: Case of North Lebanon

The purpose of this study is to systematically study differences if any, between parental perception and the actual weight status of children in north Lebanon. In addition, this research will assess the knowledge of the parents with respect to the potential health risks associated with obesity and overweight.

Co-investigators: Hiba El-Rouaiheb, Jessica Saliba, and Rana El-Bikai

Funding: None

Status: Published

Principle Investigation: Nivine Abbas

Plagiarism knowledge, attitudes and self-reported practices among academic researchers

The purpose of this study is to explore knowledge attitudes and self-reported practices (KAP) towards plagiarism among researchers in Lebanon.

Co-investigators: Asmaa Abdelnaby, Ahmed Samir Abdelhafiz.

Funding: None

Status: Writing and editing of article

Principle Investigation: Nivine Abbas

Factors influencing the participation of adolescents in research related to sexual and reproductive health in the Arab Region

The purpose of this study is to explore the factors that influence the participation of adolescents in research related to sexual and reproductive health in the Arab Region.

Co- investigators: Maryam Aly.

Funding: University of Maryland

Status: Writing and editing of article

Principal Investigator: Nivine Abbas

Exploring the Drivers of Hesitancy towards COVID-19 Vaccine among Syrian Refugees Residing in Mount Lebanon: A Qualitative Study

This study aimed to explore the reasons for Covid-19 vaccine hesitancy among middle-aged adults of Syrian Refugees in Mount Lebanon. A qualitative study design and an ethnographic approach were adopted.

Co-investigators: Masa Al Fakih, Lara Obeid, Emile Whaibeh

Funding: none

Status: Manuscript submitted, under review

Principal Investigator: Abir Abdel-Rahman

Predictors of the intake of sugar sweetened beverages and water among high school students in Lebanese public schools using the theory of planned behavior

This study aims to test the extent to which the theory of planned behavior (attitude, subjective norms and perceived behavioral control) can predict the students' intentions to drink SSBs and water. In addition, to test the extent to which the theory of planned behavior (attitude, subjective norms and perceived behavioral control) can predict the intake behavior of SSBs and water intake.

Co-investigators: Bahia Abdallah and Habbouba Aoun.

Funding: UOB Research Grant

Status: Ongoing

Principal Investigator: Abir Abdel-Rahman

Physicians' perceptions towards venous thromboembolism practice guidelines implementation using the theoretical domains framework

This cross sectional electronic survey study will be conducted at five tertiary hospitals from the different existing Mouhafazat in Lebanon and from four hospitals in Dubai. It aims to explore the physicians' perceptions towards VTE using the TDF.

Co-investigators: Lara Youssef, Juliana Abboud, and Bahia Abdallah.

Funding: UOB Research Grant

Status: Ongoing

Principal Investigator: Abir Abdel-Rahman

Exploring the behavior of adding sugar to milk and beverages: A qualitative approach.

The purpose of this study is to explore "Adding Sugar Behaviour" in primary caregivers and to investigate potential underlying factors. 26 in-depth interviews were conducted with the mothers, fathers and grandmothers of students from four public schools in Lebanon.

Co-investigators: Cynthia Pine, Pauline Adair, and Nada Kassem.

Funding: WHO

Status: Completed. Manuscript writing

Principal Investigator: Abir Abdel-Rahman

Using the theory of planned behavior to investigate the predictors of adding sugar behavior among mothers of Lebanese children in public schools.

This study aimed to establish the socio-demographic characteristics that discriminate between mothers who intend to stop/reduce 'adding sugar' to their children's beverages and those who do not, and between parents and caregivers who actually do add sugar to their children's beverages and those who do not. In addition, it aimed to test the extent to which the theory of planned behavior (attitude, subjective norms, and perceived behavioral

control) can predict the parents' intention to stop/reduce the ASB behavior to their children's beverages

Co-investigators: Pauline Adair, Nada Kassem and Rana Abdel Samad.

Funding: WHO

Status: Completed. Manuscript writing in progress

Principal investigator: Pauline Adair and Juliana Abboud

A qualitative study of physicians' perceptions and preferences when making decisions about following the Venous Thromboembolism (VTE) clinical practice guidelines based on the Theoretical Domains Framework

This current study will use the Theoretical Domains Framework (TDF) to examine and identify the beliefs and barriers to changing the behavior and practice of physicians towards implementing VTE clinical practice guidelines. A series of interviews will be conducted to explore reasons for or against undertaking VTE risk assessment and delivering appropriate prophylaxis. The clinical behavior of interest is thus specified as "conducting VTE risk assessment for hospitalized medical patients and ordering recommended Prophylaxis".

Co-investigators: Abir Abdel Rahman and Martin dumpster.

Funding: Dubai Health Authority (DHA)

Status: Writing manuscripts

Principal Investigator: Elias Abdo

Viral Upper Respiratory Tract Infection Occurrence Among Diabetic Patients During Winter-2023 and Winter- 2024

This research aims to screen the susceptibility of diabetic patients to VURTI in Dubai. Additionally, this study will identify the viral agents responsible for the infection among this group of subjects.

Co-investigators: Dr. Haytham Darwish, Dr. Abir Abdel Rahman

Funding: Dubai Academic Health Corporation

Status: Not started yet

Principal Investigator: Elias Abdo

Detection of antimicrobial activity of extracts from indigenous Malva sylvestris and Ficus carica against multidrug resistant microorganisms isolated from different hospitals in Lebanon

The purpose of this new project is to identify that specific plants possess antimicrobial activities on multidrug resistant microorganisms. This will provide insights for identifying the antimicrobial components.

Co-investigators: Master students.

Funding: None

Status: Not started yet

Principal Investigator: Elias Abdo

Determination of the epidemiology and characterization of *Stenotrophomonas maltophilia* isolated from clinical and environmental areas in UMC and Tertiary Hospitals

The purpose of this research is to identify the presence of *Stenotrophomonas maltophilia* in hospitals especially in detergents and soaps. It will also evaluate the resistance profile of these strains.

Co-investigators: Master students.

Funding: None

Status: Not started yet

Principal Investigator: Elias Abdo

Evaluating the Effect of *Inula viscosa*, *Prunus dulcis*, *Chamomile nobile*, *Syzygium aromaticum* Extracts on Multi-Drug Resistant Microbes

The purpose of this project is to detect the antimicrobial activities of selected Lebanese plants on multidrug resistant microorganisms. This will provide insights for identifying the antimicrobial components.

Co-investigators: Master students.

Funding: None

Status: Not started yet

Principal Investigator: Charbel Al-Bayssari

clbP gene, a potential new member of the β -lactamase family

The purpose of this project is to investigate the β -lactamase properties of the clbP gene in silico by analyzing its phylogenetic relationship with bacterial β -lactamase and peptidase enzymes; to compare the clbP three-dimensional (3D) protein structure with that of bacterial β -lactamases, and to evaluate in vitro its enzymatic activities including β -lactamase, nuclease, and ribonuclease.

Co-investigators: Adel Azour and Jean-Marc Rolain.

Funding: None

Status: Paper Published in MDPI IJMS journal IF 5.54

Principal Investigator: Charbel Al-Bayssari

Phylogenetic, serologic, resistome and sequence type analysis of 28,000 human and animal *Escherichia coli* genomes: on the lookout for colibactin pks-island

The purpose of this project is to analyze the resistome profile, the serotype, the phylogroup of 28,000 genomes of Escherichia coli. We also screened the genomes for the presence of the pks-island genes by local BLASTn version 2.9.0 against the complete pks-island of E. coli IHE3034 (including flanking regions) to determine the prevalence of pks positive island in E. coli genomes.

Co-investigators: Adel Azour and Jean-Marc Rolain.

Funding: None

Status: Ongoing

Principal Investigator: Charbel Al-Bayssari

Worldwide prevalence of colibactin and cancer-A systematic review

This review explores: colibactin's overview, transmission, resistance profile, and impact on nuclear remodeling, inflammatory bowel disease (IBD), autophagy, and biofilm formation. Additionally, it will go over research results relating colibactin to cancer, primarily colorectal cancer and its prevalence around the world. This is the first review that discusses colibactin in-depth, and its correlation with other variables and colorectal cancer.

Co-Investigators: Adel Azour and Jean-Marc Rolain.

Funding: None

Status: Ongoing

Principal Investigator: Charbel Al-Bayssari

Fecal Carriage of Resistant Genes among Healthy Infants

In the past, the fetus gut was considered sterile, but the gestational age, type of delivery and feeding affect their stool flora. Infants born vaginally may acquire their gut flora from their mothers. The gastrointestinal tract is an important reservoir of antibiotic resistance genes that can be transferred to pathogenic species, making it a threat. Maternal GIT microbes can be transmitted to the offspring, leading to complicated and hard-to-treat infections, and recent studies have indicated that such transfer starts before birth. Therefore, determining the presence of resistant bacteria in newborns is crucial to help in developing appropriate health care strategies and awareness.

Co-Investigators: Dr. Mira Chaar and a Master student

Funding: None

Status: Ongoing

Principal Investigator: Mathilde Azar

Impact of infertility on psychological and sexual wellbeing of the couples

The purpose of this study is to assess the effect of infertility on both men and women undergoing infertility treatment and to investigate factors that can effect depression, anxiety and sexual function.

Co-investigators: Lina Badr & Salma Lamaa.

Funding UOB Grant

Status: Submitted for publication

Principal Investigator: Mathilde Azar

Elements that reflect a community of inquiry in the design of emergency online learning: an activity theory perspective in higher education

The purpose of this mixed method study, framed by the “Activity Theory”, is to investigate, in an emergency remote learning situation (a) the online learning activities, technologies, and interactions perceived as conducive to students’ learning, and (b) the extent to which such activities promote a Community of Inquiry (CoI) approach to online learning.

Co-investigators: Ghania Zgheib & Sara Salloum.

Funding: UOB Grant

Status: Ongoing. One Chapter was published in Springer Nature. Cognitive Presence as a Catalyst for Creating a Community of Inquiry in Online Learning: Insights from a Lebanese Higher Education Context. We are finalizing a quantitative paper to submit very soon and working on a qualitative paper.

Principal Investigator: Mathilde Azar

Determinants of female sexual functioning and breastfeeding.

The study will explore the determinants of sexual function of breastfeeding women by conducting a systematic review of the existing literature about the topic and undertaking a quantitative cross-sectional study with a sample of 280 participants.

Co-investigators: Peggy Germanous, Christine Azar, Samah Tawil.

Funding: Proposal submitted for UOB Grant

Status: Ongoing.

Principal Investigator: Mathilde Azar

Academic Advising.

The study will explore students and instructors perception of academic advising using a mixed method approach.

Co-investigators: Hiba Habib, Vicky Gebran, Rabab Hourani.

Funding: Submitted for a UOB Grant

Status: Proposal under preparation.

Principal Investigator: Amani Bayrakdar

Type 1 diabetes in Emerging Adults in Lebanon: A mixed Methods Study

This study aims to: 1) explore the experience of emerging adults with type 1 diabetes mellitus in Lebanon, 2) describe their diabetes outcomes; 3) determine the sociodemographic and clinical predictors of diabetes outcomes (HbA1c level, acute complications and diabetes distress), and explore the role of 4) self-care and social support in these relationships.

Co-PIs: Samar Nouredine, **Huda Abu-Saad Huijer**, Houry Puzantian, Mona Nasrallah, Hala Tfayli, Kevin Joiner and Pamela Martyn-Nemeth.

Funding: University Research Board, AUB

Status: PhD successfully defended. Manuscript writing ongoing

Principal Investigator: Hala Chamieh

Development of a novel biosensor for measurement and capture of atmospheric carbon dioxide

Climate change is now considered as one of the main challenges facing humankind. The year 2020 was indicated as the globally warmest year within the decade by Copernicus Climate Change service. A major contributor to this ever-growing issue of climate change is the rise in atmospheric greenhouse gases including carbon dioxide, methane, and nitrous oxide. New research axes have evolved and use engineered microbes to convert carbon dioxide into next-generation sustainable biofuels. The purpose of this study is to develop a microbial biosensor for the measurement and capture of atmospheric carbon dioxide. The project will aid with on-site measurement of atmospheric carbon dioxide and will open the way to a cleaner way of producing novel biomolecules as opposed to the conventional method of using unsustainable fossil fuels.

Co-investigators: Samir Taha.

Funding: UOB master student budget, to be submitted to local and international funds

Status: Ongoing

Principal Investigator: Hala Chamieh

Bioproduction of novel pharmaceutical molecules in metabolically engineered microbes

Biotechnology industry is one of the main contributors to the world economy with a market value of 852.8 billion dollars in 2021. New methods through metabolic engineering have been developed to enhance strain productivity, which paved the ways toward revolutionizing conventional chemical manufacturing. The purpose of this study is to produce industrial pharmaceutical molecules by genetically engineering microbes. By using multidisciplinary approaches of bioinformatics, genetic engineering, bioprocess and enzyme engineering, novel molecules from extreme microorganisms are produced using

synthetic biology approaches. These novel biomolecules display innovative properties and find many applications in therapeutics, cosmetics, and tissue engineering.

Co-investigators: Thierry Benvegno, Sylvain Tranchimand, Samir Taha, Abir Abdel-rahman.

Funding: UOB master student budget, to be submitted to local and international funds

Status: Ongoing

Principal Investigator: Mira El chaar

Virulence-Associated Genes Analysis and Molecular Typing of Klebsiella pneumoniae Strains Isolated From Patients With Bacteremia

The main goal of this project is to study the evolution of Klebsiella pneumoniae causing bloodstream infections and understand the dynamics and answer important questions that impact human health.

Co-investigators Elias Abdo

Funding: UOB grant

Status Not started yet

Principal Investigator: Mira El chaar

Serological and molecular prevalence of Hepatitis E virus among blood donors in Lebanon

Immunocompromised patients usually require large amounts of blood transfusion, exposing them to several blood-transfused pathogens. In Lebanon, epidemiological studies around the Hepatitis E virus circulation is very limited. This study will evaluate the prevalence of HEV in blood donors in Lebanon from different hospitals.

Co-investigators Elias Abdo

Funding: UOB grant

Status Not started yet

Principal Investigator: Mira EL Chaar

Molecular epidemiology of sexually transmitted diseases among women seeking Gynecological checkups

The purpose of this project is to estimate the prevalence of sexually transmitted infections in Lebanon and strengthen the knowledge about common microorganisms infecting women who are seeking check-ups in various clinical settings in Beirut including hospitals and dispensaries.

Co-investigators: None

Funding: CNRS

Status: Completed. Two articles were published.

Principal Investigator: Mira EL Chaar

Identification and characterization of bacteria in human breastmilk and their transfer to the newborn's gastro-intestinal tract

The purpose of this project is to investigate the bacterial composition of breastmilk from healthy lactating women and investigate the transfer of resistant bacteria from mothers to newborns.

Co-investigators: Bahia Abdallah and Abir Abdel-Rahman.

Funding: UOB research grant

Status: Completed. One article was published.

Principal Investigator: Mira EL Chaar

Identification of pathogens in diarrheal stool samples via multiplex PCR panels for prevailing gastroenteritis microbial agents and improving etiological diagnosis

The purpose of this study is to identify the etiologies of gastroenteritis in Lebanese patients and study their seasonality.

Co-investigators: None.

Funding: UOB graduate students seed grant

Status: An article was submitted to a peer review journal.

Principal Investigator: Mira EL Chaar

Susceptibility profile of carbapenem resistant Enterobacteriaceae to Ceftazidime Avibactam and their mechanism of resistance in Lebanon

The purpose of this project is to determine the resistant rate among Escherichia coli and Klebsiella pneumoniae against Ceftazidime-Avibactam, detect the genes conferring resistant to carbapenem and identify mutations that could be associated with the high level of resistance.

Co-investigators: None

Funding: UOB graduate students seed grant

Status: Completed. The article was published.

Principal Investigator: Mira EL Chaar

Colonization of carbapenemases, extended spectrum beta-lactamases producing bacteria and colistin resistant bacteria from hospitalized patients

The purpose of this project is to study the carriage of fecal extended spectrum betaLactamases, carbapenemases producing bacteria and colistin resistant bacteria in hospitalized intensive care units' patients and identify their corresponding resistance genes upon admission and during their hospitalization.

Co-investigators: None

Funding: UOB graduate students seed grant

Status: Completed. The article was recently accepted to Spectrum Microbiology with minor revision.

Principal Investigator: Mira EL Chaar

The composition of the microbiota in the full-term newborn's gut, and mother's colostrum and breastmilk: evidence of early bacterial transmission.

The purpose of this project is to:

Investigate the bacterial composition of breastmilk from healthy lactating mothers who have delivered in Saint Georges' University Medical Center.

Evaluate the antibiotic resistance patterns of the identified bacterial isolates.

Investigate the transfer of resistant bacteria from the mother's breast milk to the newborn's gastrointestinal tract, by comparing bacterial species isolates from both mothers and infants by NGS (next generation genome sequencing).

Check for the presence of mobile genetic elements and especially antibiotic resistance genes (ARGs).

Co-investigators: Dr Bahia Moufti

Funding: UOB research grant

Status: Ongoing

Principal Investigator: Mira EL Chaar

Molecular and Epidemiological typing of bacteria causing bloodstream infections In Lebanon

The purpose of this project is to:

Identify the most prevalent bacterial pathogens involved in bloodstream infections in major tertiary care centers in Lebanon

Investigate the molecular characteristics of the identified bacterial isolates.

Assess the evolution of antimicrobial resistance in most abundant identified isolates and their association with virulence genes, plasmids and mobile genetic elements.

Co-investigators: Dr Elias Abdo

Funding: None

Status: Ongoing

Principal Investigator: Mira EL Chaar

Serological and molecular prevalence of Hepatitis E virus among blood donors in Lebanon

The purpose of this project is to:

Investigate the seroprevalence of anti-HEV antibodies in blood donors in Lebanon.

Investigate the presence of HEV RNA in seropositive blood donors.

Follow up on HEV transfusion reactions in blood recipients.

Co-investigators: Dr Elias Abdo

Funding: None

Status: Ongoing

Principal Investigator: Marwan El-Sabban (AUB) and Jessica Saliba

Effect of novel smoking modalities on the expression and function of PML nuclear bodies and of cell membrane proteins.

The purpose of the study is to investigate how novel smoking modalities (compared to the combustible cigarette) modulate the expression of PML nuclear body proteins, as well as proteins involved in cellular junctions (such as ZO-1) and inter-cellular communication (Connexins).

Co-investigators: Marwan El-Sabban (AUB) and Jessica Saliba.

Funding: AUB intramural grants

Status: Ongoing

Principle Investigator: Marwan El-Sabban (AUB)

Epigenetic regulation of Cx43 expression in laboratory models of inflammatory bowel disease and colorectal cancer

The purpose of the study is to unveil mechanisms by which chronic intestinal inflammation might lead to mutations and malignancy in the colon.

Co-investigators: Jessica Saliba.

Funding: AUB intramural grant

Status: Ongoing / First paper published

Principal Investigator: Marwan El-Sabban & Jessica Saliba

Effect of smoke exposure cessation on the survival of lung epithelial cells and behavior of stem cells

The purpose of the study is to investigate whether the damage caused by the exposure of lung epithelial cells and stem cells to novel smoking modalities is reversible.

Funding: UOB intramural grant

Status: Ongoing

Principal Investigator: Marwan El-Sabban

Development of an in vitro model mimicking the blood-brain barrier for drug discovery

The purpose of the study is to develop a 3D in vitro model using exclusively human cells composing the blood-brain barrier; with the purpose of creating a platform for drug delivery to the brain and central nervous system as well as unveiling mechanisms of cancer cell metastasis to the brain.

Co-investigators: Jessica Saliba and other AUB Faculty members

Funding: Intramural grants at AUB

Status: Completed. Manuscript in writing

Principal Investigator: Jessica Finianos

Observational and Prospective Study of Chronic Pain in the Child and Adolescent Population Living in Lebanon.

The purpose of this epidemiological study is to improve the understanding about chronic pain in children and adolescents living in Lebanon.

Co-investigators: Jordi Miró – Peggy Germanos

Funding: None

Status: Ongoing, data collection.

Principal Investigator: Jessica Finianos

Professional Education about Pediatric Pain and Current Treatment Practices among Healthcare Professionals Working in Lebanon: A Survey Study.

The purpose is to examine the education and training in pain of healthcare professionals working in Lebanon and their current practices in the management of children with chronic pain:

Co-investigators: Jordi Miró, Huda Huijjer

Under review in Comprehensive Child and Adolescent Nursing

Principal Investigator: Lara Haddad

Deciphering the cross-talk between the microbiome and the intestinal epithelial cells in IBD Lebanese patients

The purpose of this study is to better understand the pathogenicity of the Inflammatory Bowel Disease. genetic analysis will be conducted to try to find a signature of SNPs for Lebanese patients susceptible to develop IBD. The study will investigate the molecular mechanism that leads to inflammation and induces the breaching of the intestinal epithelial barrier.

Co-investigators: Dr. Lina Tawk.

Funding: University of Balamand Research Grant

Status: Not started yet

Principal Investigator: Lara Haddad

The association between the polymorphism of the interleukin 8, 10 genes and the clinical manifestations of Helicobacter pylori's infection in the Lebanese population

This study was trying to find a correlation between polymorphism in IL-8 cytokine gene and the clinical manifestations of Helicobacter pylori's infection. It was discovered that Vac A

gene is affecting the expression level of IL-8, thus inflammation, hence progression of H. pylori.

Co-investigators: Dr. Antoine Geagea.

Funding: University of Balamand Grant for Masters Students

Status: Masters completed for Mrs. Stephany AL Jalbout. Manuscript Writing

Principal Investigator: Lara Haddad

Helicobacter pylori infected Lebanese patients and its effect on epithelial cells invasiveness

The purpose of this study was to evaluate the prevalence of H. pylori in the Lebanese population in patients aged 18 years and above, and to explore the effect of CagA on gap junctions' disruption and hence its contributing role to epithelial cells' invasiveness.

Co-investigators: Dr. Antoine Geagea.

Funding: University of Balamand Grant for Masters Students

Status: Masters completed for Mrs. Margarita Ann Al Rammouz. Manuscript Writing

Principal Investigator: Lara Haddad

Inflammatory Bowel Disease. Immunology and Molecular Biology

Genetic signature of Inflammatory Bowel Disease patients in Lebanon

Inflammatory Bowel Disease (IBD) is a term used to describe major disorders characterized by the chronic inflammation of the digestive tract: Ulcerative Colitis (UC) and Crohn's Disease (CD). The etiology of the disease is believed to involve many factors such as environmental, genetics, epithelial, microbial, and immune responses. Despite all the efforts, available data on IBD from the Middle East region remains scanty. The purpose of this study is to gain detailed insight into the evolution of the disease in Lebanon as well as its causative agents. This will improve early diagnosis, patient education and targeted treatment options.

Funding: UOB graduate students seed grant

Status: Project to be started Fall semester 2022

Principal Investigator: Melissa Makhoul

Pain Catastrophizing and Pain Resilience as Predictors of Patient-reported Outcomes in Individuals with Chronic Musculoskeletal Pain.

To examine the influence of negative psychological factors (pain catastrophizing and pain-related fear) and positive psychological factors (pain resilience, pain self-efficacy) on the interference of pain in daily life and health-related quality of life (HrQoL) in individuals with chronic musculoskeletal pain (CMP).

Co-PIs: Huda Abu-Saad Huijjer, Samar Nouredine, Souha Fares, Imad Uthman, Christopher France, Douglas French, Laila Farhood.

Funding: None

Status: Dissertation successfully defended in 2023. Manuscript writing ongoing

Principal investigator: Dima Mnayer

Development of a cooked snack food product rich in protein

The purpose of this study is to develop a new protein-rich potato-based product “protein chips”. This consists of testing various protein. Sensory analyzes to identify the organoleptic characteristics of this product and assess consumer acceptance and preferences sources.

Co-PIs: Carine Joubrane

Funding: Daher Group

Status: Completed, Manuscript writing ongoing

Principal investigator: Dima Mnayer

Development of healthy gluten-free wraps: Nutritional, Functional and Sensory Properties

The purpose of this study is to create different formulations of a new gluten-free wrap, based mainly on available and healthy ingredients from Lebanese market.

Co-PIs: Maria el Zoghbi (Student), Kifah Ammar

Status: Project thesis 2024

Funding: None

Status: Ongoing

Principal investigator: Dima Mnayer

Implementation of HACCP system in Spice Stores

The purpose of this study is to ensure the safety and quality of spices and to develop HACCP plans specific to the handling, storage, and packaging of spices.

Co-PIs: Jad Antoine Ishak Mouawad (student)

Status: Project thesis 2024

Funding: none

Status: Ongoing

Principal Investigator: Myriam Mrad Nakhlé

Environmental exposures in Lebanese infants EELI study- birth cohort study

The Environmental Exposure in Lebanese Infants (EELI) study is a longitudinal birth cohort designed to assess a wide range of pre and post-natal environmental exposures and genetic

factors underlying the health and development of Lebanese infants in Beirut. The aim of the study is to better understand the origins of complex and often lifelong diseases like asthma, allergies, and other chronic conditions.

Co-investigators: From FHS- UOB: Nivine Abbas, Roubina Karhily. From FM-USJ: Georges Abi Tayeh, Emile Whaibeh. INSERM UMRS1136 France: Isabella Annesi-Maesano and CHILD Cohort team at McMaster University.

Funding: WHO fund and Intramural UOB fund

Status: Data collection, analysis, writing and editing of articles

Principal Investigator: Myriam Mrad Nakhlé

Health Effects of Lebanese Schools Indoor Environment HELSIE Study

Health Effects of Lebanese School Indoor Environment (HELSIE) aims to investigate the association between the exposure to indoor air pollutant in Lebanese schools with respiratory health indicators and school performance.

Co-investigators: From UOB: Roubina Karhily, Lina Jaalouk. From FS-USJ: Wehbeh Farah and Maher Abboud.

Funding: Intramural Fund at USJ for Dr. Wehbeh Farah

Status: Co-supervisor of a Ph.D. student. Data collection, analysis, writing and editing of articles

Principal Investigator: Myriam Mrad Nakhlé

Beirut Air Pollution and Health Effects BAPHE Study Phase II

The Beirut Air Pollution and Health Effects BAPHE I study aimed to determine the relationship between short-term variations in ambient concentrations of particulate matter (PM10 and PM2.5) and emergency hospital admissions in the city of Beirut, and whether susceptible groups are more greatly affected. BAPHE II is an extension of phase I. The association between air pollution and health effects will be studied over 3 years.

Co-investigators: From FS-USJ: Wehbeh Farah and Maher Abboud.

Funding: Conseil de la Recherche USJ

Status: Completed. Remaining activities: Data analysis and article writing

Principal Investigator: Myriam Mrad Nakhlé

Vicarious Trauma and PTSD of humanitarian workers who were victims of Beirut Explosion

Vicarious trauma and PTSD of disaster traumas are major contributors to anxiety and depression for humanitarian aid workers. Few studies have examined the vicarious trauma of relief workers and other studies have examined the trauma of adults and children after certain disasters; however, the situation of Lebanon creates an exemplary case study. The

aim of this research is to study the collective trauma of the Lebanese relief workers that were victims of the Beirut explosion, but also operated in its wake to support other victims.

Co-investigators: Nivine Abbas, Roubina Karhily.

Funding: None

Status: Completed- articles submitted

Principal Investigator: Myriam Mrad Nakhlé

The association of COVID-19 infection with changes in dietary and sleeping patterns, lifestyle and behavioral changes in children in Lebanon, 2021

The study aims to describe the clinical symptoms in children ≤ 18 years diagnosed with COVID-19 and residing in Lebanon and investigate the COVID-19 impact on children's dietary and sleeping patterns, lifestyle and behavior changes.

Co-investigators: Julia Chbeir, Nadine Haddad (Ministry of Public Health).

Funding: None

Status: Data collection/ Remaining activities: data analysis and article writing

Principal Investigator: Myriam Mrad Nakhlé

Menstrual hygiene management and period poverty

The study aims to assess the knowledge, attitude, and practices of menstrual hygiene among high school females between 13 and 19 years old in public and private schools in Lebanon.

Co-investigators: Denise Nemr, Pamela Sleiman, Nivine Abbas, Roubina Karhily, Lina Jaalouk.

Funding: None

Status: Data collection/ Remaining activities: data analysis and article writing

Principal Investigator: Myriam Mrad Nakhlé

The Geo Hub for climate and health in Middle East and North Africa

The goal of the GeoHealth Hub is to address the effects of climate change on health and the environment, identify areas for development, and train higher education staff in Lebanon, Jordan, and Morocco in air pollution modelling, water quality and epidemiological methods.

Co-Investigators: Nivine Abbas, Georges Mitri, Emile Whaibeh, Georges Abi Tayeh, Joumana Yeretian, Berj Hatjian. Jordan University of Science and Technology (JUST), the University of California in San Diego, and Mohammed VI Polytechnic University (UM6P) in Morocco. The partnership also includes the World Health Organization (WHO)'s Center for Environmental Health Action, the University of California Berkely, Harvard University.

Funding: National Institutes of Health (NIH)

Budget: The \$ 3 million grant will be shared by all collaborating institutions to implement the project over the course of 5 years.

Status: Launching phase Conference and workshop completed for year 1

Principal Investigator: Myriam Mrad Nakhlé

Strengthening Primary Health Care in Lebanon Following the COVID-19 Pandemic: A Telehealth Pilot Study

The objective of this project is to strengthen the capacities of primary healthcare centers in Lebanon through the adoption of telehealth.

Increase the level of knowledge of PHC personnel on topics related to health promotion and health education in areas like immunization, COVID-19 vaccination, reproductive health services, and mental health services.

Increase through training of trainers (TOT) the level of knowledge, awareness, and readiness of PHC personnel in using telehealth in their primary healthcare service delivery.

Improve the access of patient populations in the catchment areas of the selected PHCs to immunization, reproductive health, and mental health services provided through TH.

Co-investigators: Youssef Bassim, Emile Whaibeh, Georges Abi Tayeh, Hady Naal. Wael AL Delaimy from UCSD, Society for the advancement of science and technology in the Arab world SASTA, Health and Environment Response Agency HERA.

Funding: IOM USAID

Status: Launching phase completed. Data collection and analysis partially completed

Principal Investigator: Ghassan Nabbout

Knowledge and attitude of university students in Lebanon towards female breast cancer

In this study, we explore the knowledge and attitudes of Lebanese university students, males, and females, toward breast cancer. The study will have a cross-sectional design across all faculties at the University of Balamand

Co-investigators: Nivine Abbas, Fadi Abdulkarim, Lindsey J Anstine , Youssef Bassim, George Farah, Yara Koussa, Ziad Koussa

Funding: none

Status: Ongoing

Principal Investigator: Samar Nouredine

The Lebanese Nurses' Health

The study aims to determine the prevalence of NCDs and related risk factors among Lebanese nurses; determine the association between their NCD risk factors and work conditions; and identify their attitudes and practices in relation to health risk reduction.

Co-Investigators: Nuhad Dumit, Myrna Doumit, Joelle Seoud, Hiba Chakhtoura.

Funding: None

Status: Ongoing

Principle Investigator: Maud Rizk

Association between the dietary inflammatory index and the risk of hepatocellular carcinoma in a French cirrhotic population

This study aimed to examine the inflammatory potential of diet evaluated by the dietary inflammatory index (DII®) and its association with HCC risk among cirrhotic patients who were recruited from the French case-control study CiRCE (Cirrhosis and Risk of hepatocellular Carcinoma in the East), which included 401 cirrhotic patients without HCC (controls) and 181 cirrhotic patients with HCC (cases) recruited between 2008 and 2012 in six French university hospitals.

Co-investigators: Vanessa Cottet and INSERM laboratory

Funding: This work was supported by a French Government grant managed by the French National Research Agency under the program "Investissements d'Avenir" [reference ANR-11-LABX-0021], and also by grants from the "Conseil Régional de Bourgogne", the "Fonds Européen de Développement Régional" (FEDER), the French National Cancer Institute, the "Ligue Nationale contre le Cancer", the "Canceropole Grand-Est" and the "Fondation de France".

Status: Preparing the paper for submission

Principle Investigator: Maud Rizk

Study of the characteristics and microbiological quality of natural mineral water in the Kesserwan region.

This study presents the actual situation of some spring water in Lebanon, specifically in the Kesserwan region by testing the quality of the water, certain physico-chemical parameters such as turbidity, temperature, conductivity, pH, and microbiological in 15 different sources covering the Kesserwan region. All the parameters were studied during the winter period. The results were compared with CODEX, WHO and Libnor guidelines.

Co-investigators: None

Funding: None

Status: Finalizing the paper

Principal Investigator: Rima Saad

Primary caregivers' knowledge, attitudes and beliefs toward palliative care for Children with cancer

This study aims at examining the association of primary caregivers' KAB towards PPC with QOL of children with cancer in Lebanon in order to uncover areas for improvement.

Co-Investigators: Huda Abu-Saad Huijer, Samar Nouredine, Souha Fares, Joanne Wolfe, Ellen Smith

Funding: None

Status: Ph.D. successfully defended. Manuscript writing ongoing

Principal Investigator: Jessica Saliba

The effect of novel imidazoquinoxaline compounds on the differentiation potential of stem cells

The purpose of the study is to investigate whether novel immunomodulatory imidazoquinoxaline agents compromise stem cell activity, in terms of stem cell pool, molecular profile and ability to differentiate.

Co-investigators : Carine Masquefa-Deleuze and Pierre-Antoine Bonnet

Funding: Awaiting funding

Status: Pilot study completed.

Principal Investigator: Abdullah Shaito

Evaluation of the impact of different smoking modalities on development and cellular differentiation in a zebrafish model and human stem cells

Co-PI: Jessica Saliba

Funding: Qatar University grant 2023

Status: Ongoing

Principal Investigator: Mireille Serhan

Biogenic amines in dairy products

The purpose of this study is to assess the technological and environmental effects on the occurrence of biogenic amines in commonly consumed cheeses in the East Mediterranean.

Co-investigators: UOB (Iman Dankar) and LAU (Hussein Hassan).

Funding: UOB funding

Status: Ongoing

Principle Investigator: Mireille Serhan

Safety and toxicity of pet food

The purpose of this study is to assess the chemical and microbiological safety of commercial pet food products (canned and dried) in Lebanon and UAE.

Co-investigators: LAU (Hussein Hassan Dr. Elias Akoury) and Abu Dhabi University (Nissrine Alwan).

Funding: UOB and LAU (allocated budget for graduate research) and ADU (intramural grant for Dr. Nissrine Alwan)

Status: 1st manuscript published in Frontiers in Veterinary Sciences IF 3.4.

2nd manuscript write-up is ongoing.

Principal Investigator: Mireille Serhan
Safety and toxicity of breakfast cereals

The purpose of this study is to assess the chemical and microbiological safety of breakfast cereals.

Co-Investigators: Hussein Hassan, Elias Akoury, Nissrine Alwan, and Maria Deghel.

Funding: UOB and LAU (allocated budget for graduate research) and ADU (intramural grant for Dr. Nissrine Alwan)

Status: 1st manuscript is under review in Scientific reports journal IF 4.6

2nd manuscript write-up is ongoing.

Principal Investigator: Mireille Serhan
Pet food safety practices

The purpose of this study is to assess the knowledge and attitudes of pet owners regarding the safety and handling practices of food.

Co-Investigators: Hussein Hassan, Hani Dimassi

Funding: None

Status: Manuscript write-up is ongoing.

Principal Investigator: Mireille Serhan
Antibiotic use among veterinarians

The purpose of this study is to assess the knowledge, attitudes of perceptions of Lebanese veterinarians regarding antibiotic use.

Co-Investigators: Imane Dankar (UOB) and Hussein Hassan (LAU).

Funding: None

Status: Manuscript under review in Frontiers in Veterinary Sciences journal.

Principal Investigator: Mireille Serhan
Zhourat Health potential

The purpose of this study is to assess the bioactive potential of eleven plants (antioxidant and antimicrobial capacity) and their extraction conditions.

Co-Investigators: Marc Beyrouthy (USEK) and Hussein Hassan (LAU).

Funding: None

Status: Book chapter under review in Springer References series in Phytochemistry.

Principal Investigator: Mireille Serhan
Food safety and security in Lebanon during economic crisis

The purpose of this study is to establish the associations between food security status, financial wellbeing, sociodemographic and economic characteristics with food safety parameters among a sample of the Lebanese population.

Co-Investigators: Joanne Karam (LAU), Lamis Jomaa (North Carolina Central University), Pascale Salameh (LU) and Hala Sacre (INSPECT-LB).

Funding: None

Status: Manuscript write-up is ongoing.

Principal Investigator: Ghania Zgheib (FAS-UOB)

Faculty readiness to teach online

The purpose of this study is to examine the readiness of faculty at the University of Balamand to teach online.

Co-investigators: Mireille Serhan and Roula Al Daia (FOBM).

Funding: None

Status: Completed. Manuscript published in Heliyon (Elsevier journal), IF 3.77.

COMMUNITY ENGAGEMENT PROJECTS

Project: Development of contextualized guidelines and capacity building for UNICEF partners and counterparts on COVID-19: IPC, prevention, and community engagement

Director	Habbouba Aoun
Team Members	Habbouba Aoun, Cecile Lahoud, Gretta Shoucair, Micheline Kobrossy, Rachelle Daoud, Sanaa Chabbani, Zeina Saliba
Funding	UNICEF
Status	Completed (Oct 2020-June 2021)

Project: Evaluation of Engaging Men Program

Director	Habbouba Aoun
Team Members	Rana Barazi, Micheline Kobrossy, Cecile Lahoud, Gretta Shoucair, Rachelle Daoud
Funding	UNICEF
Status	Completed (Dec 2020-Feb 2021)

Project: Human Rights (Dealing with the Past - Memories for the Future)

Director	Habbouba Aoun
Team Members	Habbouba Aoun, Rana Barazi, Sanaa Chabbani, Gretta Shoucair, Cecile Lahoud
Funding	OHCHR
Status	In progress (January - Dec 2021)

Project: Promoting Sustainable Management of Water Services and Resources in Countries Affected by the Syrian Crisis

Director	Habbouba Aoun
Team Members	Habbouba Aoun, Rachelle Daoud, Gretta Shoucair, Cecile Lahoud
Funding	World-GVC
Status	In progress (Feb 2021 – December 2021)

Project: Explosive Ordnance Risk Education (EORE) (Lebanese context)

Director	Habbouba Aoun
Team Members	Habbouba Aoun, Zeina Saliba, Micheline Kobrossy, Rachelle Daoud, Sanaa Chabbani, Gretta Shoucair, Cecile Lahoud
Funding	UNICEF
Status	Completed (Jan 2020 - Sept 2021)

Project: COVID 19- Response

Director	Habbouba Aoun
Team Members	Habbouba Aoun, Cecile Lahoud, Gretta Shoucair, Micheline Kobrossy, Rachelle Daoud, Sanaa Chabbani, Zeina Saliba
Funding	UNICEF
Status	In progress (June 2021- Feb 2022)

Project: Capacity building – Nutrition Campaign

Director	Habbouba Aoun
Team Members	Habbouba Aoun, Rana Barazi, Gretta Shoucair, Cecile Lahoud, Sanaa Chabbani

Technical Support Bahia Abdallah and Dominique Dano

Funding UNICEF

Status In progress (May – Dec 2021)

Project: Addressing the Needs of Vulnerable Groups in Lebanon Mine Victim Assistance

Director Habbouba Aoun

Team Members Habbouba Aoun, Rana Barazi, Rachelle Daoud, Gretta Shoucair, Cecile Lahoud, Micheline Kobrossy

Funding ITF

Status In progress (February 2021 - December 2022)

FHS PUBLICATIONS

- 1- Rassam RS, **Abu-Saad Huijer, H.**, Nouredine S., Smith, EML., Wolfe, J., Fares, S., Abboud, M. Unfolding parental knowledge, attitudes and beliefs toward palliative care for children with cancer. *Pediatr Blood Cancer*.2023; e30484. 70 (9). First published: 08 June 2023
<https://doi.org/10.1002/pbc.30484>
- 2- **Abu-Saad Huijer, Huda**|Sailian, Silva Dakessian||Fares, Souha||**Bassila, Joelle**, Predictors of quality of life in older adult patients in Lebanon: a cross sectional study, National Library of Medicine, *Annals of Palliative Medicine*, 12(2), 357.
<https://dx.doi.org/10.21037/apm-22-619>
Received outstanding author award.
- 3- **Abbas, N., Rouaiheb, H., Saliba, J., & El-Bikai, R. (2023).** Childhood obesity: Facts and parental perceptions. *World Academy of Sciences Journal*, 5, 38.
<https://doi.org/10.3892/wasj.2023.215>
- 4- Hani, Rita||Khayat, Luna||**Rahman, Abir Abdel**||Alaaeddine, Nada Effect of stem cell secretome in skin rejuvenation: a narrative review, Springer, *Molecular Biology Reports*, Volume 50, July15

- 5- Gnimavo, Ronald SÃ´tondji||Fajloun, Faraj||**Al-Bayssari, Charbel**||Sodjinou, Espoir||Habib, Akimath||Ganlonon, Line||Claco, Eric||AgoundotÃ©, Irvine||Houngbo, Odile Adjouavi||Anagonou, EsaÃ´ Gimatal||Biaou, Chabi Alphonse Olaniran||AyÃ©lo, Adjimon Gilbert||Houezo, Jean Gabin||Boccarossa, Alexandra||Moussa, Elie Hajj||Gomez, BÃ©atriz||Gine, Anna||Sopoh, Ghislain Emmanuel||Marion, Estelle||Johnson, Roch Christian||Kempf, Marie, Importance of consultations using mobile teams in the screening and treatment of neglected tropical skin diseases in Benin , National Library of Medicine , PLoS neglected tropical diseases, Volume 17, May 23
- 6- Fajloun, Faraj||Ganlonon, Line||Gnimavo, Ronald SÃ´tondji||Sodjinou, Espoir||Habib, Akimath||Claco, Eric||AgoundotÃ©, Irvine||Adeye, Ambroise||Catraye, Perrin||**Al-Bayssari, Charbel**||Moussa, Elie Hajj||Robbe-Saule, Marie||Houezo, Jean Gabin||Kpoton, Godwin GÃ©rard||AyÃ©lo, Adjimon Gilbert||Gomez, Beatriz||Johnson, Roch, An Overview of 10 Years of Activity of a Molecular Laboratory for Buruli Ulcer Diagnosis at a Field Hospital in Benin , National Library of Medicine, Journal of clinical microbiology, Volume 61, June 20
- 7- Tabcheh, Jinane||Vergalli, Julia||Davin-RÃ©gli, Anne||Ghanem, Noha||Pages, Jean-Marie||**Al-Bayssari, Charbel**||Brunel, Jean Michel, Rejuvenating the Activity of Usual Antibiotics on Resistant Gram-Negative Bacteria: Recent Issues and Perspectives, National Library of Medicine, International Journal of Molecular Sciences, Volume 24 , Jan 23
- 8- Nocari, Iman||Fadel, Doha||**Dano, Dominique**||El-Bikai, Rana||**Abbas, Nivine H.**, Knowledge, attitudes, and practices (KAP) toward COVID-19: A cross-sectional study among university students in Lebanon, Taylor & Francis Online, Journal of Human Behavior in the Social Environment, Volume 33, May 17
- 9- Finianos, J, Sanchez-Rodriguez E, Miro J. (2023). On the Unidimensionality and Agreement of Four Self-Report Pain Intensity Scales: A Study with Arabic-Speaking Children and Adolescents. Child Care in Practice. In Press.
- 10- **Gemayel, Jack**||Chaker, Diana||El Hachem, Georges||Mhanna, Melissa||Saleme, Rawad||Hanna, Colette||Harb, Frederic||Ibrahim, Ahmad||Chebly, Alain||Khalil, Charbel, Mesenchymal stem cells-derived secretome and extracellular vesicles: perspective and challenges in cancer therapy and clinical applications, Springer, Clinical and Translational Oncology, Volume 25, July 23
- 11- El Khoury, Maria||Salloum, Tamara||Al Kods, Ibrahim||Jisr, Tamima||**Chaar, Mira El**||Tokajian, Sima, Whole-genome sequence analysis of carbapenem-resistant Enterobacteriaceae recovered from hospitalized patients, Elsevier, Journal of Global Antimicrobial Resistance, Volume 34, Sep 23

- 12- Obeid, Joelle||Shaito, Abdullah||Hajj, Hiba El||Deleuze-Masquefa, Carine||Bonnet, Pierre Antoine||El-Sabban, Marwan||**Saliba, Jessica** Biological applications of imiquimod analogues: An update (Review) SPANDIDOS Publications World Academy of Sciences Journal, Volume 8, June 30
- 13- El-Hajjar, Layal||**Saliba, Jessica**|Karam, Mario||Shaito, Abdullah||El Hajj, Hiba||El-Sabban, Marwan, Ubiquitin-Related Modifier 1 (URM-1) Modulates Cx43 in Breast Cancer Cell Lines, National Library of Medicine, International journal of molecular sciences, Volume 24, Feb 23
- 14- Rahi, Berna El||Mehanna, Zeina||Haidar, Suzan||**Serhan, Mireille**:|Hassan, Hussein F., Food allergies and allergens in Lebanon: Characterization and perceptions toward labeling, Elsevier, World Allergy Organization Journal, Volume 16, Feb
- 15- **Serhan, Mireille**|Yakan, Mira||Serhan, Carole, Sports nutrition knowledge translates to enhanced athletic performance: a cross-sectional study among Lebanese university athletes, Emerald Publishing Limited, Nutrition & Food Science, Volume 53, Aug 1
- 16- Serhan, Carole|**Serhan, Mireille** , Impact of nutrition service attributes on patient satisfaction: evidence from an outpatient clinic at a Lebanese-Middle Eastern hospital, emerald publishing, EuroMed Journal of Business, Volume 18, Feb 24
- 17- **Serhan M** and Julien SG (2024) Editorial: Adherence to the Mediterranean diet: microbiota and non-communicable diseases. Front. Nutr. 10:1352672. doi: 10.3389/fnut.2023.1352672
- 18- **Whaibeh, Emile**|**Mrad, Myriam**||Aouad, Norma||Annesi-Maesano, Isabella||**Abbas, Nivine H.**|Chaiban, Clara||**Abi Hanna, Jowy**||Abi Tayeh, Georges , The Environmental Exposures in Lebanese Infants (EELI) birth cohort: an investigation into the Developmental Origins of Health and Diseases (DOHaD), Taylor & Francis Online , International Journal of Environmental Health Research, Still in press

BOOK CHAPTERS

1. **Jessica Saliba**, Maya El-Sabban, Abdullah Shaito, Mohammad El-Harakeh, Joelle Obeid, Hiba El Hajj, and Marwan El-Sabban. Springer Nature Switzerland AG 2023 N. Rezaei (ed.), Handbook of Cancer and Immunology, https://doi.org/10.1007/978-3-030-80962-1_57-1
2. Abdullah Shaito, **Jessica Saliba**, Joelle Obeid, Mohammad El-Harakeh, Hiba El Hajj, and Marwan El-Sabban. Springer Nature Switzerland AG 2023 N. Rezaei (ed.), Handbook of Cancer and Immunology, https://doi.org/10.1007/978-3-030-80962-1_39-1

SCIENTIFIC CONTRIBUTIONS

Huda Abu-Saad Huijer

- Melissa Makhoul. Ph.D. Supervisor. The Role of psychological factors in predicting patient-reported outcomes in chronic musculoskeletal pain. Successfully defended in 2023.
- Jessica Finianos; The epidemiology of chronic pain and its impact on young people in Lebanon.. Partial supervision of PhD work. Successfully defended in 2023.
- Rebecca Farah. Cardiovascular and Pulmonary Rehabilitation in Lebanon. University of Maastricht. External Examiner.
- Hassan Maatouk. The Effect of Public Access Defibrillation Programs on Survival of Out-Of-Hospital Cardiac Arrest Victims in Lebanon. External Examiner.

Nivine Abbas

- Fall 23-24: MA Graduate Thesis Supervision, Jina Abdel Samad, Department/Program of Psychology, UOB Ongoing.
- Fall 23-24: MA Graduate Thesis Supervision. Larissa El Khoury, Department/Program of Psychology, UOB Ongoing.
- Fall 23-24: MPHP Practicum advisor/supervisor, Maria Abou Jaoude, Planning an outreach plan to increase the percentage of right holders accessing the health services offered by Amel Association's PHC in Karm el Zeytoun, Achrafieh- Lebanon. Ongoing.
- Summer 22-23: MPHP Practicum advisor/supervisor. Jihane Bou Samra, Improving Public Health Preparedness to COVID-19 and Future Emergencies in Lebanon:

Integrating a program for Community health workers in primary health care. Completed.

- Summer 22-23: MPHP Practicum advisor/supervisor. Rana Bou Said, Support The Implementation Of Saqirh Project In Karm Zaitoun And Ain El Remmaneh Centers. Completed.
- Spring 22-23: MPHP Practicum advisor/supervisor. Dana Baghdadi, Awareness sessions for nursing students regarding most common mental health issues and the coping mechanisms among nurses in Lebanon. Completed.
- Spring 22-23: MPHP Practicum advisor/supervisor. Rayan Hamza, Health Awareness Materials Developer for Health Awareness Sessions at AMEL association PHCCS and MMUs. Completed.
- Spring 22-23: MPHP Practicum advisor/supervisor. Sahar Kamel, Nurses' Knowledge And Skills Assessment Related To Central Line Bloodstream Infection Prevention: A Pilot Study At SGHUMC. Completed
- Spring 22-23: MPHP Practicum advisor/supervisor. Michella Chahine, Hypertension Awareness Session: Material Preparation And Knowledge Assessment. Completed
- Spring 22-23: MPHP Practicum advisor/supervisor. Lilian Rayes, Ethical Policies in The Workplace. Completed.
- Spring 22-23: MPHP Practicum advisor/supervisor. Pamela Salem, Design And Evaluation Of Awareness Sessions On Cholera And Bacterial Infections For Caritas Youth. Completed
- Spring 22-23: MPHP Practicum advisor/supervisor. Jaafar Zeindee, Smoking Prevention For Secondary High School Students In Borj Al-Barajina, Complete
- Spring 22-23: MPHP Practicum advisor/supervisor. Amani Yehia, Psychosocial Support for Older Adults in their Community, Completed

Abir Abdel-Rahman

Co-Supervisor of the internship of the following students:

- Zeinab Mroueh: Implementation of the CAP accreditation of the pathology Lab at Hammoud Hospital.
- Karen Gharzeddine: Total Quality Management Implementation and Barriers.
- Sara Bashour and Samer Gharzeddine: towards implementing electronic medical records for quality documentation and safe care provision.
- Joy Haidamous: Examining the influential factors of disk diffusion method in urine and stool samples.
- Oussama Awad: The compliance of HHUMC Laboratory with MOPH licensure criteria.

- Rana Nassouh :Evaluation of the process requirement application based on ISO15189 in a hospital in Tripoli.
- Lama Kobrossy: Evaluation of the waste management protocol in a well reputable food company.

Elias Abdou

- Master internship co-supervisor: Dolyan al Abed The Application of Failure Modes and Effects Analysis at a Clinical Laboratory in a Private Hospital in North Tripoli.
- Master internship co-supervisor: Jean Fata; Improving Quality Management Systems of Laboratories to Accelerate Laboratory Accreditation. Ongoing.
- Master internship co-supervisor: Bouchra doueih: Quality management and patient safety in a leading hospital laboratory in north lebanon
- Master Supervisor : Rola Al Aridi; Evaluating the Effect of *Inula viscosa* and *Prunus dulcis* Extracts on Multi-Drug Resistant Microbes isolated from different Lebanese hospitals. Ongoing
- Master Supervisor : Maha Ghourabi; Occurrence of Viral Upper Respiratory Tract Infection Among Diabetic Patients During Winter-2023and Winter- 2024 . Ongoing
- Master Supervisor :Lama Hilal; Evaluation of the Antimicrobial activity of *Syzygium aromaticum* and *Chamaemelum nobile* against MDR bacteria in Lebanon. Ongoing
- Master Supervisor : Aya dasouki; Screening for the antibacterial activity of the extracts obtained from *Ficus carica* and *Malva sylvestris* on highly drug-resistant bacteria. Ongoing
- MSc Supervisor: Georges Saleh; Evaluation of the gene expression of selected virulence factors in *Pseudomonas aeruginosa* at various site of infection.
- Msc Co-Supervisor: Samir Kazzi; Characterisation of virulence factors of *Escherichia coli* causing bloodstream infection. Ongoing.
- Master Co-Supervisor: Elissa Massihy; Seroprevalence of Hepatitis E virus among blood donor Lebanon. Ongoing.
- Master co-supervisor: Joy Bitar; Characterization of the virulence factors of *Klebsiella pneumoniae* causing bloodstream infection. Ongoing.

Charbel Al-Bayssari

- Ph.D. Supervisor: Adel Azour; Molecular and genome analysis of *Escherichia coli* strains: Prevalence of colibactin and antimicrobial resistance. Dissertation completed in 2022.
- Ph.D. Supervisor: Jinane Tabcheh; Subversion of the maltose absorption pathway to circumvent antibiotic resistance in Gram-negative bacteria. Ongoing.
- Ph.D. Supervisor: Faraj Fajloun; Neglected tropical diseases with cutaneous manifestations: towards the development of new preventive, diagnostic and treatment strategies. Ongoing.

Mathilde Azar

- Jury member of an MPH thesis: Factors Associated with Sexual Response After the Birth of a Child: Cross Sectional Study in A Sample of Men and Women Living in Lebanon in 2023. Faculté de Médecine, Institut Supérieur de Santé Publique, USJ.
- PhD supervisor: Access of Older People to Primary Health Care in Lebanon: A Qualitative Study. University College of Dublin - School of Nursing, Midwifery and Health Systems, since 2020. Ongoing.
- MSN thesis supervisor: Maria Kertenian; Knowledge of registered nurses about compassion. Barriers and facilitators in the deliverance of compassionate care. Ongoing.
- MSN thesis supervisor: Reem AlHakim; Adverse Childhood Experiences and Depression: A Cross-Sectional study. Ongoing.
- MSN thesis supervisor: Manal Ayoub; Professional Autonomy among Clinical Nurses in Intensive Care Units in Saudi Arabia: A Qualitative Study. Ongoing.
- MSN thesis supervisor: Josiane Haddad; The Impact of Cultural Diversity on the Quality of Care Provided at the Saudi German Hospital. Ongoing.
- MSN clinical project supervisor: Nanor Garabedian. Pain Management in the Neonatal Intensive Care Unit at the American University of Beirut. Ongoing.
- MSN thesis supervisor: Nathalie Mounayar; Ehealth literacy and associated factors among Lebanese nurses: A cross sectional study. Ongoing.

Mira Chaar (EI)

- MSc Supervisor: Yaralynn Khoury; *Colonization of carbapenemases, extended spectrum beta-lactamases producing bacteria from hospitalized patients*. Ongoing.
- MSc Supervisor: Jean Marc Mardorissian; Tracing of Mother-Infant transmission of resistomes by metagenomic analysis. Ongoing.
- MSc Supervisor: Lydia Hanna; The patterns of antibiotic resistance in Gram-Negative bacteria causing bloodstream infections. Ongoing.
- MSc Co-Supervisor: Joy Bitar; Characterization of virulence factors of *Klebsiella pneumoniae* causing bloodstream infection. Ongoing.
- MSc Co-Supervisor: Lama Hilal; Characterization of virulence factors of *Escherichia coli* causing bloodstream infection. Ongoing.
- MSc Co-Supervisor: Elissa Massihy; Seroprevalence of Hepatitis E virus among blood donors in Lebanon. Ongoing.
- MSc Co-Supervisor: Charbel Adaimy; Identification of resistant bacteria in the meconium of neonates. Ongoing.

Jessica Saliba

- MSc Supervisor: Jean-Pierre Nehme; Molecular pathways underlying loss of differentiation potential of stem cells exposed to different smoking modalities. Ongoing.
- MSc Supervisor: Ali Amhaz; Exploring the interplay between NRF2, TET-2 and MDR1 in a model of colon inflammation and IBD-related carcinogenesis. Starting.
- MSc Supervisor: Fouad El Feghali; Evaluating the effect of novel imidazoquinoxalines with anti-cancer properties on the ability of stem cells to self-renew and to differentiate. Starting.

Mireille Serhan

- MSc co-supervision: Amal Melhem. Occurrence of Biogenic amines in traditional cheeses. Ongoing
- MSc co-supervision. Anasya Eid. Occurrence of Biogenic amines in industrial cheeses. Ongoing.

SCHOLARLY LECTURES

Huda Abu-Saad Huijer

- Pediatric Palliative Care in Lebanon. The 5th Maruzza Foundation Congress on Pediatric Palliative Care. Rome, Italy. Invited Speaker.
- Welcome word; Geo Hub for Climate Change and Health international conference at the University of Balamand. June 22, 2023.

Nivine Abbas

- Presented (virtually) a presentation titled “Suggested updates on the Ethics Guidelines for Environmental Epidemiologists: Obligations to Individuals and Communities Subjected to Research” as part of the Environmental health data and research: Ethical challenges and opportunities in the technology age symposium; ISEE 2023 – 35th Annual Conference of the International Society for Environmental Epidemiology, September 20, 2023.
- Presented (virtually) a presentation titled “Perceptions of researchers on the factors influencing the participation of adolescents in sexual and reproductive health research in the Arab world: A qualitative study.” as part of the Fogarty Bioethics Trainee Webinar, December 13,

Mathilde Azar

- Guenia Zgheib, Sara Salloum, Mathilde Azar. Fostering a Community of Inquiry in online learning in a Lebanese higher education institution. Paper presented at the 20th International Conference of the Arab Academy of Sciences: Higher Education in the Arab World: E-Learning and Distance Education. Beirut, Lebanon.

Mira Daher

- Trends and Amounts of Consumption of Low-calorie Sweeteners: A Cross-sectional Study. The 4th Conference of Nutrition and Technology. USJ, Beirut. November 202

Mireille Serhan

- Mireille Serhan, Andrea Aoun, Maria el Deghel, Carole Serhan. (2022). Physico-chemical, microbiological and sensory characteristics of concentrated yogurt (Labneh) made from goat milk with added pomegranate peel extract. Presented virtually at the American Dairy Science Association (ADSA) annual meeting, June 19-22, Kansas, U.S.A..
- Hassan HF, Awada F, Dimassi H, El Ahmadieh C, Hassan NB, El Khatib S, Alwan N, Abiad MG, Serhan M, Darra NE. Assessment of mycotoxins in cornflakes marketed in Lebanon. *Sci Rep.* 2023 Nov 28;13(1):20944. doi: 10.1038/s41598-023-48172-8. PMID: 38017057; PMCID: PMC10684495.
- Dankar I, Hassan HF and Serhan M (2023) Attitudes and practices on antibiotic use and its emerging threats among Lebanese dairy veterinarians: a case study from a developing country. *Front. Vet. Sci.* 10:1284656. doi: 10.3389/fvets.2023.1284656
- Rahi, B., Mehanna, Z., Haidar, S., Serhan, M. & Hassan, H. (2023, December). Food allergies and allergens in Lebanon: characterization and perceptions toward labeling. Presented at the 17th Dubai International Food Safety Conference (DIFSC), Impact of Climate Change on Food Safety, December 11-13, Dubai, UAE. (POSTER).

EDITORIAL POSITIONS

Huda Abu-Saad Huijjer

- Associate editor and later member of Editorial Board, International Journal of Nursing Studies
- Editorial Board, Journal of Transcultural Nursing
- Editorial Board, Journal of Nursing Scholarship
- Editorial Board, Japanese Journal of Nursing Science
- Editorial Board, Nursing Children and Young People
- Editorial Board, Annals of Palliative Medicine
- Review Editor, Frontiers in Pain Research

Charbel Al-Bayssari

- Reviewer Antimicrobial Agents and Chemotherapy (AAC)
- Reviewer International Journal of Antimicrobial Agents (IJAA)
- Reviewer Emerging Infectious Diseases (EID)
- Expert Review of Anti-infective Therapy
- Reviewer Burns
- Reviewer New Microbes New Infections (NMNI)

Mathilde Azar

- Reviewer: International Journal of Therapy and Rehabilitation.
- Reviewer: Journal of Sexual and Reproductive Health
- Reviewer: Journal of Clinical Nursing
- Reviewer: PLOS Global Public Health
- Reviewer: Journal of Sex and Marital Therapy

Mireille Serhan

- Editorial Board Member, Societal Impacts Journal (ELSEVIER)
- Associate Editor, Frontiers in Nutrition Journal (FRONTIERS)

PROFESSIONAL PRACTICE/SERVICE

PROFESSIONAL PRACTICE

HUDA ABU-SAAD HUIJER

- Member, Harvard Global Equity Initiative-Lancet Commission on Global Access to Pain Control and Palliative Care (GAPPCP).
- Founding President, Chi Iota Chapter, Sigma Theta Tau International Honor Society in Nursing in Lebanon.
- Consultant, WHO EMRO on the Future of Nursing and Midwifery in the Eastern Mediterranean Region.
- Vice-President, National Committee on Pain Relief and Palliative Care (Appointed by Minister of Health); Chair, Research Committee.
- Past president, Lebanese Society for the Study of Pain.
- Member, Advisory Board of the Order of Nurses in Lebanon.
- Member, Association of Deans and Directors of Schools of Nursing in Lebanon.
- Advisory Board, Semahat Arsel Nursing Education, Practice, and Research Center (SANERC), Koc University, Turkey.
- External Reviewer: Proposal to establish a Bachelor Degree of Science in Nursing at the University of Kuwait.
- Member of International Association for the Study of Pain Advocacy Working Group.
- Board member, Research Center for the Scientific Society of Arab Nursing Faculties.
- Member of the Scientific Board, 6th Maruzza Foundation Congress on Pediatric Palliative Care, October 16-18, 2024, Rome, Italy.

Nivine Abbas

- Member in the Eastern Mediterranean Chapter, International Society for Environmental Epidemiology (ISEE) (starting 2022).
- Member in the ISEE Ethics and Philosophy Committee (starting 2022).
- Member in Le Groupe de Réflexion sur l'Éthique en Méditerranée (GREM) (starting 2018).

Abir Abdel Rahman

- Member of the UK society of Behavioural Medicine

Charbel Al-Bayssari

- Member, International Society for Infectious Diseases.
- Member, American Society of Microbiology.

- Member, European Society of Clinical Microbiology and Infection (ESCMID).
- Member in the specialized program committee in the Ministry of Education and Higher Education (September 2022- present).

Mathilde Azar

- Member of the Order of Nurses in Lebanon.
- Member of the Lebanese Order of Midwives.
- Member of the SIDIEF (Secrétariat international des infirmières et infirmiers de l'espace francophone).
- Member, Association of Deans and Directors of Schools of Nursing in Lebanon.
- Member of the Council of International Neonatal Nurses (COINN).
- Member of the Technical Committee of the MEHE for the review of the curricula.
- Reviewer in many journals.

Hiba Chakhtoura

- Member of the Colloquium – MEHE
- Member of the Order of Nurses in Lebanon.

Mira Daher

- Member, Lebanese Order of Dietitians (ID# 40), (January 2022-present)
- Member, Disciplinary council, Lebanese Order of Dietitians (November 2022-present)

Zeina Dassouki

- Member, American Association for Cancer Research (AACR)

Mira El Chaar

- Member - American Society for Microbiology (ASM)
- Member- International Society of Blood Transfusion (ISBT)
- Member -European Society of Clinical Microbiology and Infection (ESCMID)
- Member - Lebanese MLS colloquium committee

Jessica Finianos

- Member in the International Association for the Study of Pain.

Peggy Germanous

- Member of the Order of Nurses in Lebanon.

Rabab Hourany

- Member of the Order of Nurses in Lebanon.

Dima Mnayer

- Member, Lebanese Order of Engineers and Architects, Beirut, Lebanon (ID#28038) (2004)

Myriam Mrad

- Chair of the Eastern Mediterranean Chapter of the International Society of Environmental Epidemiology ISEE
- Associate Editor, Journal of Health and Pollution

Mireille Serhan

- Member, Journal of Dairy Research Community (Hannah Dairy Research Foundation and Journal of Dairy Research) (November 2021-To present).
- Invited Member, Abu Dhabi University Global initiative (November 2021- present).
- Member, International Association of Food Protection (IAFP), Iowa, USA, (June 2019- Present).
- Member, European Federation of Food Science and Technology (EFFoST), (2018-Present).
- Member, Lebanese Order of Engineers and Architects, Tripoli, Lebanon. (ID# 6535), (2009-Present).

SERVICE TO FHS AND UOB

FHS STANDING COMMITTEES

FACULTY COUNCIL	Strategic Plan	UNDERGRADUATE CURRICULUM	RESEARCH
Dean Huijjer (Chair)	Dr. M. Chaar (Chair)	Dr. N. Abbas (Chair)	Dr. M. Mrad (Chair)
Dr. A. Nasreddine	Dr. H. Aoun	Dr. H. Chamieh	Dr. D. Mnayar
Dr. M. Azar	Dr. J. Saliba	Dr. M. Rizk	Dr. C. Bayssari
Ms. M. Mrad	Dr. D. Mnayer	Ms. H. Chakhtoura	Dr. M. Azar
Dr. M. Serhan	Dr. M. Azar	Lynn Merhi (NP) * Elected Student	Dr. M. Rizk
Dr. H. Aoun			Dr. H. Aoun
			Cyril Khalil (PH)* Elected Student

ACADEMIC COMMITTEE	GRADUATE STUDIES	PRE-MED	STUDENT OUTCOME
Dr..H.Chakhtoura (Chair)	Dr. M. Azar (Chair)	Dr. L. Haddad (Chair)	Dr. J. Saliba (Chair)
Dr. H. Aoun	Dr. L. Haddad	Mrs. H. Habib	Dr. M. Moussa
Mrs. C. Constantine	Dr. M. Mrad	Ms. G. Abou Lteif	Dr. M. Rizk
Mrs. P. Germanos	Dr. M. Serhan	Mrs. H. Rouaiheb	Mr. E. Wheibeh
Mrs. L. Jaalouk	Dr. H. Aoun	Dr. N. Abbas	Mrs. R. Chaddad
Mrs. H. Rueiheb	Alicia Abi Nader (MPH) * Elected Student	Ms. L. Greige	Mrs. P. Germanos
Mrs. T. Maaraoui		Maria Abdo (MLS) * Elected Student	

WEBSITE / SOCIAL MEDIA	STUDENTS' RECRUITMENT	CAMPUS LIFE & CULTURAL
Mr. E. Wheibeh (Chair)	Dr. A. Nasreddine (Chair)	Dr. H. Aoun (Chair)
Mrs. C. Constantine	Dr. M. Daher	Mrs. C. Lahoud
Mr. D. Atallah	Dr. H. Aoun	Mr. D. Atallah
Mrs. H. Habib	Mrs. L. Jaalouk	Ms. G. Shoucair
Mrs. M. Deghel	Mrs. P. Germanos	Mrs. Maria Deghel
Dr. E. Abdo	Mrs. R. Chaddad	Mrs. J. Broumana
Mrs. M. Shehadie Ex Officio	Carla Abou Zein * Elected Student	Mrs. L. Jaalouk
		Dr. J. Fenianos

SUMMER INSTITUTE	ALUMNI	NEWSLETTER
Dr. M. Rizk (Chair)	Dr. E. Abdo (Chair)	Dr. C. Bayssari (Chair)
Dr. H. Aoun	Dr. A. El Zein	Mrs. L. Dib
Dr. M. Azar	Dr. E. Rahal	Mrs. M. Khalil
Dr. M. Mrad	Ms. H. L. Affara	Mrs. R. Hourany
Dr. D. Mnayer	Dr. K. El Firikh	Dr. M. Daher
Dr. Z. Dasouki	Mrs. L. Jaalouk	Dr. N. Abbas
	Ms. M. Chrabieh	Dr. J. Fenianos

	Mrs. M. Khalil	
	Dr. Z. El Khatib	
	Gian Carlo Sayah (MLS) * Elected Student	

FHS FACULTY MEMBERS SERVING ON UOB COMMITTEES

Admissions Committee

Mrs. Layal Greige

Administrative Committee

Dr. Maud Rizk

Scholarships Committee

Dr. Myriam Mrad

Ms. Hiba Rouaiheb

Dr. Elias Abdo

Library Committee

Dr. Nivine Abbas

Recruitment Committee

Dr. Abir Abdel Rahman

Dr. Myriam Mrad

Dr. Mira Daher

University Wide Curriculum Committee

Mrs. Peggy Germanos

Dr. Dima Mnayer

Dr. Abir Abdel Rahman

Commencement Committee

Dr. Zeina Dassuki

Ranking Committee

Dr. Mathilde Azar

Online Teaching & Assessment Committee

Dr. Jessica Saliba

Internationalization & Engagement Committee

Dr. Habbouba Aoun

UOB Senate

Dr. Elias Abdou

Mrs. Hiba Habib

UOB SP

Dr. Mira El Chaar

UOB Quality Assurance Committee/ACQUIN

Dr. Nivine Abbas & Dr Mathilde Azar

UOB Research Committee

Dr. Charbel Al Bayssari

IRB

Dr. Nivine Abbas & Dr Abir AbdelRahman

University Code of Conduct committee

Dr Mireille Serhan

FUTURE DIRECTIONS

FHS plans to expand its current undergraduate and graduate academic programs, establish market-driven online diploma and certificate programs, place more emphasis on research and scholarly productivity of faculty and graduate students, and continue to contribute to the development of healthcare in Lebanon and the region. FHS will continue to put emphasis on the following strategic goals:

- Recruitment of top-caliber and highly accomplished faculty members.
- Supporting current faculty in applying for promotions.
- Recruitment and retention of top-caliber students.
- Achieving accreditation for all academic programs.
- Creation of academic Centers of Excellence.
- Launching an interdisciplinary Ph.D. program.
- Launching online diploma/certificate programs of relevance to the health care sector.
- Establishing strategic partnerships locally and internationally.
- Engaging the community of interest in FHS academic programs.
- Establishing scholarships and endowed funds to sustain current & new programs.