

**Medical Research Lecture Series**  
**Clinical Research Institute (CRI)**  
**American University of Beirut (AUB)**

**Description:**

The medical research lecture series aim to support junior researchers in acquiring the fundamentals of medical research, including the formulation of a research question, the selection of the appropriate study design to answer a research question, the ethical perspective of clinical research, the basics of the statistical analysis, and others.

These series are delivered in 3 repetitive cycles throughout the academic year. The summer cycle (July-September) consists of bi-weekly sessions. The fall (October-March) and the spring (March-April) cycles consist of weekly sessions.

**Target audience:**

Junior researchers (students, residents, fellows, research assistants/coordinators, junior faculty), including but not limited to participants enrolled in the CRI capacity building programs (Fellowship and Residency Research Program (FRRP), Research Personnel Program (RPP) and the Post-Doctoral Program, Faculty Advancement Program (FAP).

**Learning objectives:**

- Recognize the ethical perspective of medical research
- Conduct a literature search
- Formulate a research question
- Identify the best study design to answer a research question
- Write a research proposal
- Conduct the basic statistical analysis
- Report results in a manuscript or a poster presentation

**Pre-requisite:**

None

**Logistical details of the lecture series:**

- Period : Oct 17, 2023, till March 5, 2024
- Day & Tim : Tuesdays 4:00 pm-5:00 pm (Beirut time)
- Duration : 1 hour
- Format : Hybrid via Zoom
- Location \* : Halim and Aida Daniel Academic and Clinical Center (ACC) multipurpose room 1&2

*\*For in-person attendees*

The sessions' dates, titles, and speakers are detailed in the table below:

Date	Title	Speaker
Oct 17, 2023	Introduction Formulating a research question	Marlene Chakhtoura, MD, MSc
Oct 31, 2023	Protocol write-up	Marlene Chakhtoura, MD, MSc
Nov 7, 2023	Study design I: observational studies	Martine Elbejjani, PhD
Nov 14, 2023	Study design II: Clinical trials	Marlene Chakhtoura, MD, MSc
Nov 28, 2023	Effective literature search I	Ola El Zein, PhD
Dec 5, 2023	Effective literature search II	Ola El Zein, PhD
Dec 12, 2023	End Note: a reference manager	Ola El Zein, PhD
Dec 19, 2023	Statistics I: data management and cleaning	Eman Sbaity, MD
Jan 2, 2024	Bibliometrics	Lokman Meho, PhD
Jan 9, 2024	Statistics II: descriptive analysis	Hani Tamim, PhD
Jan 16, 2024	IRB** I: Ethical considerations in clinical research	Karine Ismail, MSc
Jan 23, 2024	IRB II: Informed consent in human subject Research	Mira Zantout, BSc
Jan 30, 2024	Introduction to systematic review and meta-analysis	Elie Akl, MD, MPH, PhD
Feb 6, 2024	Manuscript writing	Elie Akl, MD, MPH, PhD
Feb 13, 2024	Statistics III: inferential analysis	Hani Tamim, PhD
Feb 20, 2024	Authorship	Elie Akl, MD, MPH, PhD
Feb 27, 2024	Poster preparation & presentation skills	Nada Assaf, MD
March 5, 2024	Research in EPIC / chart review***	Hassan Mallah, PhD

\*\*IRB: Institutional Review Board

\*\*\*Optional for non-AUB participants

### Registration:

**For AUB participants:** No pre-registration is required.

**For non-AUB participants:**

**Registration through the link:** <https://redcap.aub.edu.lb/surveys/?s=4DPTATLTNXYPJK9>

Deadline to register is **Tuesday October 10, 2023**, at **12pm Beirut Local Time**.

Registration is not confirmed unless the applicant receives an email confirmation from the CRI.

### Requirements to receive a certificate:

- Attendance of at least 80% of the medical research lecture series
- Sessions' evaluation

Upon completion of the requirements, candidates will receive a certificate of completion from the CRI.

### Program Fees:

**For AUB participants: Free of Charge**

**For non-AUB participants: 300\$**

**For participants from Lebanese Medical institutions (listed below): 100\$**

Balamand University

Beirut Arab University (BAU)

Holy Spirit University of Kaslik (USEK)  
Lebanese American University (LAU)  
Lebanese University (LU)  
Saint George University of Beirut (SGUB)  
Université Saint-Joseph (USJ)

### **About the Speakers (alphabetical order):**

#### **Elie Akl, MD, MPH, PhD**

Dr. Elie Akl is a tenured Professor of Medicine at AUB. He serves as the Associate Dean for Clinical Research, leads the division of General Internal Medicine and Geriatrics (GIMG), directs the AUB GRADE Center, and co-directs the Center for systematic reviews of health policy and systems research (SPARK). He has a part time appointment in the Department of Health Research Methods, Evidence, and Impact (HE&I) at McMaster University. He is a guideline methodologist for several North American professional organizations and the World Health Organization. He published more than 450 peer-reviewed papers and was listed by Thomson Reuters as one of the 2015 “world’s most influential scientific minds” and as one of the “Highly Cited Researchers” yearly since 2015.

#### **Nada Assaf, MD**

Dr. Nada Assaf is an Instructor of Clinical Pathology at AUB. She is in charge of the Medical Genetics division of the Molecular diagnostics section at the Department of Pathology and Laboratory medicine. Dr. Assaf is also a board member of the Pillar Genomic Institute at AUB. After earning her medical degree, she completed her residency training in Clinical Pathology at AUBMC. She then pursued a fellowship in classical and molecular cytogenetics at the Centre Hospitalier de Versailles, France. She also holds a Masters’ degree in laboratory management. Dr. Assaf is the author of several articles published in peer reviewed international journals. Her research interest revolves around hereditary cancers, and the genetic drivers of cancer.

#### **Marlene Chakhtoura, MD, MSc**

Dr. Marlene Chakhtoura is an Assistant Professor of Medicine at AUB. She serves as the Director of the Clinical Research Institute, and the Director of the Research Personnel and Post-Doctoral Program. She is the Assistant Director of the Scholars in HeAlth Research Program (SHARP) Summer. Dr Chakhtoura’s research interest revolves around bone health/osteoporosis, obesity and the link between them. She is well published in first tier journals. Dr Chakhtoura was selected to join the Alpha Omega Alpha Honor Medical Society, AUB Chapter, in 2015. She is also a recipient of several awards, from international and national institutions.

#### **Martine Elbejjani, PhD**

Dr. Martine Elbejjani is an Assistant Professor and the director of the Research Education Unit at the Clinical Research Institute and Department of Internal Medicine at AUB. She is a neuro-epidemiologist and her research focuses on studying the manifestation, interplay, and neuropathology of neurocognitive and mental health disorders in older age and on identifying their predictors and etiological pathways across the life course, with a focus on social and cardiovascular predictors and pathways. She holds a BSc and MSc in psychiatric genetics and a PhD in neuro-epidemiology from McGill University; before joining AUB, she completed a postdoctoral fellowship at the neuro-epidemiology unit of the National Institute on Aging, National Institutes of Health.

### **Ola El-Zein, PhD**

Dr. Ola El-Zein is the Director of the Medical Library and lecturer at the American University of Beirut (AUB). Dr. El-Zein holds a PhD degree in Cell and Molecular Biology. She has an extensive teaching experience at AUB and other universities since 2007. She is in charge of several research initiatives and projects and had published several research papers in prominent international journals. She works on supporting medical research and improving the quality of health information, knowledge, and research evidence to strengthen health systems and promote the dissemination of evidence-based information. She was chosen as the youngest woman scientist to participate in a plenary session about youth and science diplomacy in World Science Forum (WSF)-2017. She was also nominated as a member of the organizing committee for the WSF-2019. Dr El-Zein serves as a board member of the Arab World Association of Young Scientists. She is the first country representative for Lebanon at Healthcare Information For All (HIFA). She serves as a committee member at International Federation of Library Associations and Institutions (IFLA) and was elected as a member of the Coordinating Committee of American International Consortium of Academic Libraries (AMICAL).

### **Karine Ismail, MSc**

Mrs. Ismail has been working as a Biomedical IRB Senior regulatory analyst for 7 years. She serves as an expert in the analysis of ethical matters related to human subject protection and has reviewed more than 800 studies submitted to AUB and AUBMC, including critical and high-risk research protocols. Her thirst for knowledge allowed her to be recognized as an eLearning Ambassador for the years 2018/2019 by the AUBMC Human resources.

### **Hassan Mallah, PhD**

Dr. Hasan Mallah is an Operations Research Principal Analyst at AUBMC. He holds a PhD in Health Informatics and conducts research in Data Mining, Medical Coding, Clinical Decision Support Systems and Information Systems. Dr. Mallah is Epic certified in over 8 modules: Clinical Research / Research Informatics / Cogito Business Intelligence / Clarity Database / Caboodle Data Warehouse / Clinical Data Model / Population Health Management Clinical Build and Healthy Planet & Quality Measures.

### **Hani Tamim, PhD**

Dr. Hani Tami is the Director of the Biostatistics Unit at the CRI and Professor at the Faculty of Medicine at AUB, earned an MPH degree from Emory University (1995), and a Doctor of Philosophy degree in Epidemiology and Biostatistics from McGill University (2003). Dr. Tamim has more than 200 publications in peer-reviewed medical journals. His professional expertise includes, but is not limited to, research methodology, data management, analysis and reporting

### **Mira Zantout, BSc**

Ms. Mira Zantout is currently the Human Research Protection Program (HRPP) Compliance officer at the HRRP. Mira is responsible for conducting audits to evaluate the researchers' compliance with approved protocols, applicable laws and AUB regulations and policies regarding protection of human subjects in research. Ms. Zantout is also part of the team who prepares for accreditation and surveillance audits carried out at AUB and AUBMC, namely Joint Commission International (JCI) and Association for the Accreditation of Human Research Protection Programs (AAHRPP).

**Contact Details**

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