**Mamoun Ahram, Ph.D.**

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| *Associate professor*  *Head of Scientific Research Office* | 6 ff.jpg | |
| [m.ahram@ju.edu.jo](mailto:m.ahram@ju.edu.jo)  [Dr.Ahram@gmail.com](mailto:Dr.Ahram@gmail.com) |
| |  |  | | --- | --- | |  | <http://eacademic.ju.edu.jo/m.ahram/> |   <http://orcid.org/0000-0003-4457-3604> |
| Department of Physiology and Biochemistry  Faculty of Medicine  The University of Jordan  Amman 11942  Jordan  Tel: (962)-6-535-5000, Ext, 23481  Fax: 962-6-535-5820 | | Office of Scientific Research  Jordan University Hospital  Amman 11942  Jordan  Tel: (962)-6535-3444 / 535-3666  Fax: (962)-6-5300-820 | |
| P. O. Box 4557; Tla’ Al-Ali, 11953 – Jordan  Tel: (962)-6-581-3429 or : (962)-79-556-7779 | |  | |

##### Summary of Expertise and Accomplishments

* Extensive research in diverse fields including cancer and multiple sclerosis
* Research and technological expertise in biobanking, proteomics, cell and molecular biology, protein biochemistry, and enzymology
* Excellent administrative and management skills
* Exceptional presentation style including at international meetings
* Critique of international grants and research manuscripts submitted to peer-reviewed journals
* Expertise in proposal writing and patent preparation
* Establishment of national and international collaborations
* Exceptional skills in team work, problem solving, and interpersonal communication

# Social media

LinkedIn: Mamoun-ahram

ResearchGate: Mamoun\_Ahram

Twitter: mamounahram

Facebook: mamoun.ahram

# Scientific Measures

Google Scholar (h-index): 15

ISI Web of Knowledge (h-index): 12

Publish or Perish (h-index): 17

ResearchGate: 27.84

# Education

9/1993-8/1999 **Ph.D., Cancer Biology (minor: Pharmacology)**

Graduate Program in Cancer Biology

Wayne State University (WSU), Detroit, Michigan

*Dissertation: Rac1-induced invasion: intracellular proteolysis of the extracellular matrix*

6/1989-5/1993 **B.S., Microbiology (minor: Biochemistry),** *Magna Cum Laude (Great Honors)*

Department of Microbiology

Arizona State University (ASU), Tempe, Arizona

###### Professional positions (*full-time*)

9/2011-8/2014 **Associate Professor**

Faculty of Medicine

**The University of Jordan**, Amman, Jordan

* *Teaching biochemistry and molecule biology as individual courses or as integrative modules to medical, dental, and nursing students*
* *Member of the Research Committee (August 2014-current)*

7/2014-current **Head of the Scientific Research Office**

Jordan University Hospital, Amman, Jordan

* *Organizing, facilitating, and promoting research activities at JUH including pharmaceutical studies and clinical trials*
* *Setting up the procedural outlines of conducting research activities*

9/2011-8/2014 **Assistant Professor**

Faculty of Medicine

**The University of Jordan**, Amman, Jordan

* *Teaching biochemistry and molecule biology as individual courses or as integrative modules to medical, dental, and nursing students*
* *Head of the Instruments and Laboratories Committee (August 2013-current)*
* *Departmental representative at the Faculty Council (September, 2012-current)*
* *Member of the Conferences Committee (September, 2012-August 2013)*
* *Departmental secretariat (September, 2012-August 2013)*

6/2009-6/2011 **Director, National Biorepository Research**

**Head, Proteomics and Biospecimens Research**

King Hussein Institute for Biotechnology and Cancer

Amman, Jordan

* *Laying down infrastructure of a biobank and proteomics laboratory*
* *Preparing grants, proposals, documentations such as SOPs, policies, MOUs*
* *Recruiting and establishing collaborations*
* *Negotiating with vendors*
* *Interviewing and hiring*

9/2008-6/2009 **Assistant Professor**

Faculty of Medicine

Mu'tah University, Mu'tah, Jordan

* *Teaching biochemistry and molecule biology as individual courses or as integrative modules to the first three academic years*

9/2007-8/2008 **Assistant Professor**

**Assistant Dean for the Affairs of Basic Sciences**

Faculty of Medicine

Mu'tah University, Mu'tah, Jordan

* *Supervising the first three academic years*
* *Establishment of a research unit*
* *Improving educational facility including a teleconference facility*

2/2005-8/2007 **Assistant Professor**

**Assistant Dean for Testing Affairs and College Development**

Faculty of Medicine

Mu'tah University, Mu'tah, Jordan

* *Supervising testing and grading process for all academic years*
* *Co-developing a telemedicine facility*
* *Co-managing a World Bank grant*
* *Representing the Faculty in official meetings*
* *Supervising the establishment of the a new building for the Faculty*
* *Improving educational facility*

5/2002-9/2004 **Research scientist**

Biological Sciences Division

Battelle, Pacific Northwest National Laboratory, Richland, Washington

8/1999-4/2002 **Post-doctoral fellow**

Laboratory of Pathology

National Cancer Institute (NCI), National Institutes of Health (NIH), Bethesda, Maryland

# Teaching Experience

* Expertise in teaching biochemistry and molecular biology and genetics

9/2011-8/2014 **Associate Professor**

Faculty of Medicine

**The University of Jordan**, Amman, Jordan

* *Teaching biochemistry and molecule biology as individual courses or as integrative modules to the medical, dental, and nursing students*

9/2011-8/2014 **Assistant Professor**

Faculty of Medicine

**The University of Jordan**, Amman, Jordan

* *Teaching biochemistry and molecule biology as individual courses or as integrative modules to the medical, dental, and nursing students*

2/2012-5/2012 **Part-time lecturer**

Faculty of Medicine

Hashemite University, Zarqa, Jordan

* *Teaching biochemistry to second- and third-year students*

9/2011-1/2012 **Part-time lecturer**

Faculty of Medicine

Hashemite University, Zarqa, Jordan

* *Teaching molecular biology and genetics to second-year students*

6/2011-8/2011 **Part-time lecturer**

Faculty of Medicine

Jordan University, Amman, Jordan

* *Teaching molecular biology and genetics to second-year students*

6/2010-8/2010 **Part-time lecturer**

Faculty of Medicine

Jordan University, Amman, Jordan

* *Teaching general biochemistry to first-year students*

2/2010-5/2011 **Part-time lecturer**

Faculty of Medicine

Mu'tah University, Mu'tah, Jordan

* *Teaching biochemistry, and molecule biology as integrative modules to second and third academic years*

2/2005-6/2009 **Assistant Professor**

Faculty of Medicine

Mu'tah University, Mu'tah, Jordan

* *Teaching biochemistry, and molecule biology as individual courses or integrative modules to the first three academic years*

9/2004-2/2005 **Lecturer**

Department of Biotechnology and Genetic Engineering

Philadelphia University, Jarash, Jordan

* *Teaching general biology courses to science-oriented students*

9/1991-12/1992 **Tutor, *promoted to* Lead Tutor**

Educational Support Program, ASU

* *Teaching courses of biology, biochemistry, and organic chemistry to college students in need*

# Research training

# *Post-doctoral:*

5/2002-9/2004 **Biological Sciences Division**, Battelle, Pacific Northwest National Laboratory, Richland, Washington

* *Proteomics, Cell culture, mass spectrometry, immunoassays, and large-scale data analysis*
* *Isolation of yeast cells expressing specific immunoglobulin Fab fragments by flow cytometry*

8/1999-4/2002 **Laboratory of Pathology**, National Cancer Institute (NCI), National Institutes of Health (NIH), Bethesda, Maryland

* *Proteomic profiling of prostate and esophageal cancer using human and mouse tissues*
* *Knowledge in histological techniques and pathological interpretation of prostate and esophageal cancers*
* *Development of novel technologies for protein labeling in human tissues*
* *Negotiation with representatives of a major company for promotion of an aforementioned technology*

1. *Graduate:*

5/1994-8/1999 **Program in Cancer Research,** WSU School of Medicine

* *Elucidation of a mechanism of cell invasion using a plethora of biochemical, cellular, molecular, and immunofluorescent techniques*
* *Experience in cell imaging including fixed and live cells by confocal microscopy*
* *Practical understanding of signal transduction pathways*

1. *Undergraduate:*

1/1992-8/1993 **Department of Microbiology,** ASU

* *DNA isolation and sequencing of a pathogenic bacterial gene*

# Research funding

In progress **Association of HLA-DRB1\*1501 with multiple sclerosis in Jordan**. Abdul Hameed Shoman Fund for Supporting Scientific Research, Students: AlNajjar G and Abu Salameh E (medical students). JD 500 ($700).

5/2014-current **Association of CLEC16A with multiple sclerosis in Jordan**. Faculty of Scientific Research, The University of Jordan, Students: Hammoude H and Shaar A (medical students). JD 500 ($700).

5/2014-current **Investigation of genetic polymorphisms of the intercellular adhesion –molecule-1 (ICAM-1) among multiple sclerosis patients in Jordan** (Master's thesis). Faculty of Higher Studies, The Hashemite University. Student: Baha’ Mostapha. JD 500 ($700).

10/2013-current **The effects of metformin and androgen receptor modulators on breast cancer cell proliferation and cell cycle progression**. Faculty of Scientific Research, The University of Jordan, Student: Hanin Kayed (medical student). JD 500 ($700).

8/2013-current **Investigation of CYP24A1, CYP27B1 AND 25-Hydroxyvitamin D association with Multiple Sclerosis in Jordanian Patients** (Master's thesis). Faculty of Higher Studies, The University of Jordan. Student: Mohammad Shraideh. JD 1,500 ($2,100).

6/2013-current **The Effect of Membrane Androgen Receptors on Cellular Behaviour of Breast Cancer Cell Lines** (Master's thesis). Faculty of Higher Studies, The University of Jordan. Student: Rasha Zamel. JD 1,500 ($2,100).

04/2013-closed **MicroRNAs in the cerebrospinal fluid as biomarkers for the diagnosis, staging, prognosis and disease activity in Glioma patients.** Abdul Hameed Shoman Fund for supporting scientific Research, JD 7000 ($10.000).

02/2013-current **The three axes of breast cancer cell invasion: androgen receptor-integrins-proteases.** Scientific Research Find, Ministry of Higher Education and Scientific Research, JD 63,500 ($90,500).

02/2013 current **Expression and genetic polymorphism of androgen receptor in breast cancer.** Scientific Research Fund, Ministry of Higher Education and Scientific Research, JD 41,600 ($59,300).

09/2012-05/2013 **Genetic variations of IL-7R and IL-2R in Jordanian Multiple Sclerosis patients** (Master's thesis). Faculty of Higher Studies, The University of Jordan. Student: Leena Ibayan. JD 2,000 ($2,800).

03/2012-current **Androgen regulation of microRNA expression in breast cancer cells**, Faculty of Scientific Research, The University of Jordan, JD 12,900 ($18,000).

3/2012-current **The effect of androgen on breast cancer cell invasion**, Faculty of scientific Research, University of Jordan, JD 20,000 ($28,000).

1/2012- 05/2013 **Investigation of MERTK and TYK2 association with Mutiple Sclerosis among Jordanian Patients.** (Master's thesis). Faculty of Higher Studies, The University of Jordan. Student. Rand Zaza. JD 2,000 ($2,800).

4/2007-1/2009 **Association of Chlamydia pneumoniae and human herpes virus-6 (HHV-6) to multiple sclerosis.** Faculty of Scientific Research, Mu’tah University, JD 10,000 ($14,300)

* *The first molecular biology project at the Faculty of Medicine, Mu’tah University*
* *Involved collaboration with three neurologists from different hospitals*
* *Completed successfully with the publication of two manuscripts*

# Honors and awards

9/2010 **Travel Award**; Higher Council for Science and Technology, for the attendance of 14th International Biotechnology Symposium and Exhibition, Biotechnology for the Sustainability of Human Society, September 14-18, 2010, Rimini, Italy .

9/2006 **TWAS Prize for Young Scientist**, The Academy of Sciences for the Developing World, Trieste, Italy.

7/2006 **20th International Medical Convention**, National Arab American Medical Association (NAAMA).

1/2005 **Nominated as “*best instructor***, Philadelphia University.

4/2002 **Scholar-in-Training Award**, American Association for Cancer Research (AACR).

9/1998 **Poster Presentation,** The Second Annual WSU Research Day, WSU

12/1997 **Employee Recognition Program,** The Barbara Ann Karmanos Cancer Institute, WSU.

7/1995 **Graduate School Travel Award,** WSU, for the attendance of Histopathobiology of the Neoplasia (5 days), American Association for Cancer Research (AACR), Keystone, Colorado.

12/1991 **Academic Excellence Award,** Educational Support Program, ASU.

5/1991 **Research Writing, First Place,** Department of English, ASU.

1989-1993 D**ean's Honor List,** ASU.

# Workshops, Training, and certificates

6-7/2012 **Statistical Methods in the Health Field** (30 hours), Center for Educational Development, University of Jordan, June 10-July 1, 2012.

3/2011 **Protecting Human Research Participants**, a web-based course is offered by the NIH Office of Extramural Research; performed as part of the “*Oncology Clinical trials in the Arab Countries*” conference, March 4-5, 2011.

3/2010 **Good Clinical Practice (GCP) Training for Investigators** (full day), Roche, Amman

4-5/2009 **Statistical Packages for Social Sciences (SPSS)** (8 hours), Mu'tah University

4/2008 **Electronic learning system (Moodle)** (8 hours), Mu'tah University

7/2007 **Chromatographic applications** (3 hours), Prince Faisal Center for Dead Sea, Environmental, and Energy research, Mu’tah University

7/2006 **Advanced Cardiac Life Support (ACLS) Provider** (3 days), American Heart Association (AHA)

11-12/2005 **Habilitation of the Academic Staff** (2 hours), Mu'tah University

10/2005 **The Second Jordanian National Tempus Day** (full day), Jordanian University

3-5/2005 **Mutah University Computer Driving License** (8 hours), Mu'tah University

3/2005 **Creativity at Universities** (2 hours), Mu'tah university

5/2004 **LC/MS: The techniques of electrospray and APCI** (4 hours)**,** The American Society for Mass Spectrometry

3/2002 **Proteomics: Principles and Methods** (3 days)**,** NIH

3/2000 **Special topics in recombinant DNA** (6 days)**,** NIH

12/1999 **Expression, detection, and purification of recombinant proteins in prokaryotic and eukaryotic cells** (3 days)**,** NIH

7/1995 **Histopathobiology of the Neoplasia** (5 days),American Association for Cancer Research (AACR), Keystone, Colorado

# Scholarships and fellowships

8/1999-4/2002 **Cancer Research Training Award,** NCI, NIH

7/1996 **A NCI fellowship to participate in the Histopathobiology of the Neoplasia**

8/1995 **Graduate Research Assistantship,** WSU

8/1993-8/1995 **Thomas Rumble Fellowship (***a university-wide competitive fellowship*), WSU

1/1991 **The International Student Office,** ASU

# Affiliations

1996-current American Association for Cancer Research

1999-2000 International Proteolysis Society

1992 American Society for Microbiology

# Meeting organization

11/2009 **The Fourth Conference on Scientific Research in Jordan: Cancer in Jordan.** The Jordan Society for Scientific Research.

10/2009 **The Second Middle East and North Africa (MENA) Conference**, King Hussein Institute for Biotechnology and Cancer in collaboration with National Cancer Institute, Duke University, and European School of Oncology, Amman, Jordan.

4/2007 **The 3rd conference of the Faculties of Medicine at Jordanian Universities**, Mu'tah University

7/2006 **The 20th International Medical Convention** of The National Arab American Medical association (NAAMA-USA), Jordan

9/1998 **The WSU Graduate Student Research Day,** WSU

9/1997 **The WSU Graduate Student Research Day,** WSU

5/1995 **Lake Ontario Metastasis Group Meeting,** WSU

# Panel Discussions

7/2001 **Introduction to Proteomics Analysis on Microsamples**

Laser Capture Microdissection and Macromolecular Analysis of Normal Development and Pathology, NIH

7/2001 **Proteomics Analysis on Microsamples**

Laser Capture Microdissection and Macromolecular Analysis of Normal Development and Pathology, NIH

# Editorial Boards

03/2010-current Molecular Biology International, Hindawi Publishing Corporation, New York. ISSN:2090-2190.

# Master's examination committees

Current Androgen regulation of metalloprotease-13 (MMP-13) via the microRNA molecules, miR-100-5p and miR-125b-5p, Heba Jarrar (Advisor: Mamoun Ahram)

Current Regulation of let-7 microRNA molecules by dihydrotetosterone in breast cancer, Razan Al-Saber (Advisor: Mamoun Ahram)

Current Investigation of CYP24A1, CYP27B1 AND 25-Hydroxyvitamin D association with Multiple Sclerosis in Jordanian Patients; Mohammad Sharaideh (Advisors: Azmi Mahafzah, Mamoun Ahram)

Current The Effect of Membrane Androgen Receptors on Cellular Behaviour of Breast Cancer Cell Lines; Rasha Zamel (Advisors: Mohammad El-Khateeb, Mamoun Ahram)

Current Investigation of genetic polymorphisms of the intercellular adhesion molecule-1 (ICAM-1) among multiple sclerosis patients in Jordan; Baha’ Mustapha (Advisors: Salim Abdul-Rahman-Hashemite University, Mamoun Ahram)

7/2014 Vitamin D receptor gene polymorphisms (BsamI and Fok!) among Jordanian patients with Type 1 and type 2 diabetes mellitus, Ruba SkhniniAdvisors: Mohammad El-Khateeb, Mamoun Ahram)

5/2014 Comparison of some allele frequencies of vitamin D metabolizing enzymes (CYP2R1 and CYP27B1) gene polymorphisms between type I diabetes and non-diabeltic patient form |Jordan, Wiam Khalil Zamel (Advisors: Yacoub Irshaid, co-advisor: Mohammad El-Khateeb)

5/2014 Truncation and functional analysis of selected DNA aptamer against the AVL oncoprotein, Ikram Al-Sseit (Advisors: Mohammad El-Khateeb, Said Ismail)

5/2013 Investigation of MERTK and TYK2 association with Mutiple Sclerosis in Jordanian Patients; Rand Zaza (Advisors: Mohammad El-Khateeb, Mamoun Ahram)

5/2013 Genetic variations of IL-7R and IL-2R in Jordanian Multiple Sclerosis patients; Leena Ibayyan (Advisors: Mohammad El-Khateeb, Mamoun Ahram)

4/2013 Medicinal plants effects on the gene expression of cytochrome P450 in cultured breast cancer line; Neda’a Tanina (Advisor: Abdelkader Battah).

8/2011 Vitamin D receptor gene polymorphism among Jordanian patients with type 2 diabetes mellitus; Dalia Hanash (advisor: Azmi Mahafzah)

11/2007 Tumor necrosis factor-alpha polymorphism and inflammatory bowel disease among Jordanian patients; Mohammad Abu-Lubbad (advisor: Azmi Mahafzah)

11/2007 Antimicrobial resistance markers among Psuedomonas aeruginosa isolates from sewage effluent in Kherbet Assamra; Ahmed Haidar (adviaso: Asem Shehabi)

# Media interviews and articles as expert

12/2014 “New hope in the treatment of cancer,” SciDev.Net. [*http://www.scidev.net/mena/disease/news/Research-helps-to-unlock-secrets-of-recurring-cancers.html*](http://www.scidev.net/mena/disease/news/Research-helps-to-unlock-secrets-of-recurring-cancers.html)

08/2013 “Corona Virus in Saudi Arabia.” *BBC Arabic TV Channel*.

04/2013 “American scientists receive an award for cancer drug discovery.” *Aljazeera TV Channel.*

04/2012 "Cancer awareness." *Beit Hawa' (Eve's Home), Hayat FM radio station.*

11/2011 “The Dead Sea…is it really dead?” *Aljazeera TV Channel.*

1/2011 “Discovery of a novel gene that prevents cancer metastasis.” *Aljazeera TV Channel.*

10/2010 “New study claims ADHD 'has a genetic link'.” *BBC Arabic TV Channel*.

6/2010 “The truth about the artificial cell”, Al-Doha Magazine, Issue 33.

5/2010 “Scientists create synthetic cells.” *Aljazeera TV Channel*.

4/2010 “Genetic manipulation of female eggs stirs controversy.” *Aljazeera TV Channel*.

4/2010 “Gender issues in female athletes: the case of Caster Semenya.” *BBC Arabic TV Channel*.

# Research articles in peer-reviewed jornals

*In preparation (\* corresponding author)*

1. Gaghabir M, **Ahram M**. The role of knowledge about smoking as cancer causing among Jordanians.
2. **Ahram M**. Clinical trials in Jordan.
3. **Ahram M**, Zaza R, Mustapha E, Bawadi R, , Abu Hammad S, Abduallah S, Zihlif M. Differential expression and androgen regulation of microRNA in breast cancer cells: correlation with epithelial-to-mesenchymal transition.
4. **Ahram M**, Mustapha E, Abu Hammad S, Zihlif M. The androgen receptor agonist, Cl-4AS-1, possesses unique effects on breast cancer cells: a potential therapeutic benefit.
5. Zaza R, Ibayyan L, Dahbour S, El-Omar, Samhouri B, El-Khateeb M, **Ahram M\***. Associationn of MERTK genetic polymorphisms among multiple sclerosis patients in Jordan.

*Submitted (\* corresponding author)*

1. **Ahram M\***, Soubani M, Abu Salem L, Saker H, Ahmad M. Knowledge, attitude, and practice of genetic testing genetic counselors in Jordan: a population-based survey. J. Genet. Counsel.
2. Abu Shrea'a E, Awidi A, **Ahram M**, Zihlif MA. Alteration of gene expression in MDA453 breast cancer cell line in response to continous exposure to trastuzumab.

*Accepted for publication (\* corresponding author)*

1. Othman A, Obeidat N, Tarawneh M, Shahrouri M, **Ahram M**. Knowledge, Attitudes and Practices of Breast Cancer Screening among Women in Jordan. Health Care Women Int., 9:1-15, 2014.

*Published (\* corresponding author)*

1. Othman A, Akhu-Zahiya L, **Ahram M,** Jaghabir M. Women’s Preferences for Cancer Related Information: Evidence from a National Survey. J Am Sci., 10(9): 98-104.
2. Akhu-Zahiya L, Otham A., Jaghabir M, **Ahram M**. Media use for Seeking Health/Cancer -related Information: Findings from Knowledge, Attitudes and Practices toward Cancer Prevention and Care Survey in Jordan. Int J Nurs Pract, 20(6):608-15, 2014.
3. **Ahram M\***, Zaza R, Ibayyan I, Dahbour S, Bahou Y, El-Omar A, Samhouri B, El-Khateeb M. Towards Establishing a Multiple Sclerosis Biobank. Int J Neurosci, 124(11):812-7, 2014.
4. Gaghabir M, Al-Shareef S, **Ahram M**. Quitting smoking and utilization of smoking cessation services in Jordan: a population-based survey. East Mediterr Health J., 20(9):538-46, 2014.
5. Gaghabir M, Al-Shareef S, **Ahram M**. Pattern of cigarette and waterpipe smoking in the adult population of Jordan. East Mediterr Health J., 20(9):529-37, 2014.
6. Ibayyan L, Zaza R, Dahbour S, El-Omar, Samhouri B, El-Khateeb M, **Ahram M\***. The promoter SNP, but not the alternative splicing SNP, is linked to multiple sclerosis among Jordanian patients. J. Mol. Neurosci, 52, 467-72, 2013.
7. **Ahram M\*,** Othman A., Shahrouri M, Mustafa, E. Factors influencing public participation in biobanking. Eur J Hum Gen, 22(4): 445-51, 2014.
8. Othman A, **Ahram M,** Obeidat N, Obeidat N, Tarawneh M. Barriers for Mammography among Non-Adherent Women in Jordan: A National Survey. Life Sci J. 10(4): 2268-2274, 2013.
9. **Ahram M\***, Otham A., Shahrouri M. Public support and consent preference for biomedical research and biobanking in Jordan. Eur J Hum Genet, 21, 567-570, 2013.
10. **Ahram M\***, Othman A., Shahrouri M. Public perception of biobanking in Jordan. Biopreserv Biobank. 10(4): 361-365, 2012.
11. **Ahram M\***, El-Omar A, El-Baho Y. Detection of Chlamydia pneumoniae in multiple sclerosis patients. Jordan Med J. 44: 42-49, 2010.
12. **Ahram M\***, El-Omar A, El-Baho Y, Abu-Lobad M. Association between human herpesvirus 6 and occurrence of multiple sclerosis among Jordanian patients. Acta Neurol Scand. 120(6):430-5, 2009.
13. **Ahram M\***, Zhou L, Fang R, Al-Tawalbeh G. Estimation of membrane proteins in the human proteome. In Silico Bio. 6: 379-86, 2006.
14. Springer DL, **Ahram, M**, Adkins JN, Kathmann LE, and Miller JH. Characterization of medium conditioned by irradiated cells using proteome-wide, high-throughput mass spectrometry. Radiation Res. 164(5): 651-654, 2005.
15. **Ahram M**, Strittmatter E, Monroe M, Adkins JN, Hunter J, Miller JH, and Springer DL. Identification of Shed Proteins from CHO cells: Application of Statistical Confidence using Human and Mouse Protein Databases. Proteomics 5 (7): 1815-1826, 2005.
16. **Ahram M**, Adkins JA, Auberry D, and Springer D. A mass spectrometry-based proteomic approach for the discovery of shed proteins. Proteomics 5 (1): 123-131, 2005.
17. Tangrea MA, Chuaqui RF, **Ahram M**, Gannot G, Best CJM, Gillespie JW, Linehan WM, Liotta LA, Bonner RF, and Emmert-Buck. Expression Microdissection: Rapid Retrieval of Cells for Functional Genomics. Diag Molec Pathol. 13: 207-212, 2004.
18. Springer DL, Auberry DL, **Ahram M**, Adkins JN, Feldhaus JM, Wahl JH, Wunschel DS, Rodland KD. Characterization of plasma membrane proteins from ovarian cancer cells using mass spectrometry. Disease Markers 19: 219-228, 2004.
19. **Ahram M**, Flaig MJ, Gillespie JW, Petricoin EF, and Emmert-Buck MR. Evaluation of Ethanol-fixed, paraffin-embedded tissue for proteomic application. Proteomics 3: 413-421, 2003.
20. Gillespie JW, Best CJ, Bichsel VE, Cole KA, Greenhut SF, Hewitt SM, **Ahram M**, Gathright YB, Merino MJ, Strausberg RL, Epstein JI, Hamilton SR, Gannot G, Baibakova GV, Calvert VS, Flaig MJ, Chuaqui RF, Herring JC, Pfeifer J, Petricoin EF, Linehan WM, Duray PH, Bova GS, Emmert-Buck MR. Evaluation of non-formalin tissue fixation for molecular profiling studies. Am J Pathol. 160: 449-57, 2002.
21. **Ahram M**, Flaig MJ, Gillespie JW, Zhou G, Shu H, Duray PH, Linehan WM, Raffeld M, Ornstein D, Zhao Y, Petricoin III EF, and Emmert-Buck MR. Proteomic Analysis of Human Prostate Cancer. Mol. Carcinog. 33:9-15, 2002.
22. **Ahram M**, Sameni M, Qiu RG, Linebaugh B, Kirn D, and Sloane BF. Mechanism of Rac1-induced cell invasion: intracellular proteolysis of the extracellular matrix. Exp. Cell Res. 260: 292-303, 2000.
23. Berquin IM, **Ahram M**, and Sloane BF. Exon 2 of human cathepsin B is derived from an Alu element. FEBS Lett. 419: 121-123, 1997.
24. Yan Z, Deng X, Chen M, Xu Y, **Ahram M**, Sloane BF, and Friedman E. Oncogenic c-K-ras but not oncogenic c-H-ras upregulates CEA expression and disrupts basolateral polarity in colon epithelial cells. J. Biol. Chem. 272: 27902-27907, 1997.
25. **Ahram M**, Cheong WF, Ward K, and Kessel DH. Photoproduct formation during irradiation of tissues containing protoporphyrin. J. Photochem. Photobiol. 26: 203-204, 1994.

# Review articles *(\* corresponding author)*

1. **Ahram M\***, Petricoin EF. Proteomics discovery of disease biomarkers. Biomarker Insights 3: 325-333, 2008.
2. **Ahram, M\***. SELDI: a new comer into diagnostic medicine. Jordan Med. J. 41: 111-116, 2007.
3. **Ahram, M\***. An introduction into proteomics and its clinical applications. Saudi Med J 28: 499-507, 2007.
4. **Ahram M\*** and Springer DL. Large-scale proteomic analysis of membrane proteins. Expert Rev in Proteomics. Expert Rev Proteomics 1: 293-302, 2004
5. Gillespie JW, Gannot, G, Tangrea M, Chuaqui R, **Ahram M**, Bischel V, and Emmert-Buck MR. Molecular profiling of cancer. J. Toxicologic Pathol., 32 (supp. 1): 67-71, 2004.
6. Chuaqui RF, Bonner RF, Best CJM, Gillespie JW, Flaig MJ, Hewitt SM, Phillips J, Krizman DB, Tangrea MA, **Ahram M**, Linehan WM, Knezevic V, and Emmert-Buck MR. Post-analysis follow-up and validation. Nat Genetics, Suppl 2:509-514, 2002.
7. Gillespie JW, **Ahram M**, Best C, Swalwell J, Greenhut SI, Krizman DB, Petricoin EF, Liotta LA, and Emmert-Buck MR. Tissue Microdissection in Cancer Research. Cancer J. 7: 32-39, 2001.
8. Koblinski JE, **Ahram M**, and Sloane BF. Unraveling the role of proteases in cancer. J. Clinica. Chimica Acta. 29:113-135, 2000.

# Book Chapters

1. **Ahram M** and Emmert-Buck MR. Emerging technologies in prostate cancer research. In Prostate Cancer; Scientific and Clinical Aspects-Bridging the Gap. PD Abel and E-L Lalani, Eds. (Imperial College Press, London, UK). Pp. 619-645, 2003.
2. **Ahram M** and Emmert-Buck MR. Approaches to Proteomic Analysis of Human Tumors. In Methods in Molecular Biology: Tumor Suppressor Genes: Pathways and Isolation Strategies. Vol. 222. Wafik S. El-Deiry Ed. (Humana Press, Totowa, NJ), pp. 375-384, 2003.
3. **Ahram M** and Sloane BF. Cathepsin B in invasive tumors. In Proteolysis in Cell Function. V. K. Hopsu-Havu, M. Jarvinen, and H. Kirschke, Eds. (ISO Press, Amsterdam), pp. 455-462, 1997.
4. Sloane BF, **Ahram M**, Sameni M, Friedman E, and Moin K: Effects of oncogenic ras on the trafficking of cathepsin B in human mammary epithelial cells and human colon carcinoma cells. In: Physiology and Pathology of Intracellular Protein and Lipid Traffic. C. Isidoro and G. Gaudino, eds. (Stamperia Ugo Boccassi, Torino, Italy), pp. 73-77, 1995.

Invited talks

1. “Towards Establishing a Multiple Sclerosis Biobank in Jordan”. The 5th International Jordanian Congress of Allergy & Immunology. Amman, Jordan, May 28-30, 2014.
2. “Perception of biobanking and biomedical research in Jordan”. Biobanking: Establishing the first Cancer Biobank in Jordan. Amman, Jordan. April, 10-11.2014.
3. “Biomedical Research and Biobanking in Jordan: Public Support, Consent Preference, and Influential Factors.” 2013 Jordan Society for Medical Laboratory Sciences (JSMLS) Annual Meeting. Amman, Jordan, March 23-25, 2013.
4. “Knowledge, perception, attitude, and practice towards biomedical research and biobanking among Jordanians.” 25th International Medical Convention, National Arab American Medical Association (NAAMA), June 26-30, 2011.
5. “Are Jordanians into biobanking?” The 4th international Conference of the Jordanian Society of Pathology and Laboratory Medicine, Amman, Jordan. April, 14-16, 2011.
6. “Proteomics unraveling biomedical phenomenon.” Integrated BioBank of Luxembourg. September 20, 2010.
7. “Utilization of mass spectrometry in the discovery of shed proteins.” The Fourth Conference on Scientific Research in Jordan: Cancer in Jordan. The Jordan Society for Scientific Research. November 7, 2009.
8. “Association between human herpesvirus 6 and Chlamydia pneumoniae and occurrence of multiple sclerosis.” The 5th Science Day of the Faculty of Medicine, Mu'tah University. April 15, 2009.
9. "Tumor heterogeneity in proteomics: biology vs. technology. The 5th Scientific day for Internal Medicine Department. Al-Basheer Hospital. March, 2009.
10. “Association between human herpesvirus 6 and Chlamydia pneumoniae and occurrence of multiple sclerosis.” The 2nd International Jordanian-Egyptian Biotechnology Conference. Yarmouk University, Irbid, Jordan. November 11-13, 2008.
11. "Tumor heterogeneity in proteomics: biology vs. technology. Contemporary and New Advances in Oncology. The 6th International Jordan Oncology Society Conference In Collaboration with the Arab Medical Association Against Cancer. Amman, Jordan. November 6-8, 2009.
12. "Proteomics technologies in the discovery of disease biomarkers." Faculty of Allied Medical Sciences, Zarqa Private University, May 4, 2008.
13. "Validation proteomics biomarkers in prostate and esophageal cancers. Advances in Cancer Research: From the Laboratory to the Clinic, King Hussein Bin Talal Convention Center, Dead Sea, Jordan, March 16-19, 2008
14. "Discovery and validation of prostate cancer biomarkers. KHCBI-NCI-Duke University-Middle East and North Africa Cancer Research Conference, September 3-4, 2007.
15. "New technologies in diagnostic medicine." The 3rd conferenceof Jordanian Medical Faculties, Faculty of Medicine, Mu’tah University, April 6-7, 2007.
16. "Proteomic discovery of disease biomarkers." The 1st Egyptian-Jordanian Conference on Biotechnology and Sustainable Development: Current Status and Future Scenarios, National Research Center, Cairo, Egypt, December 11-14, 2006.
17. "Proteomic discovery of disease biomarkers." The 2nd JSP International Conference, Jordan Society of Pathology and Laboratory Medicine, Amman, Jordan, August 31-September 3, 2006.
18. "Estimation of membrane proteins in the human proteome." The 20th International Medical Convention of The National Arab American Medical association (NAAMA-USA), Amman, Jordan, July 3, 2006.
19. "Advanced techniques in detection of disease biomarkers." The 4th Science Day of the Faculty of Medicine, Mu'tah University. March 6, 2006.
20. "Application of proteomics in discovery of disease biomarkers"
    1. King Hussein Cancer Center, Amman, Jordan, June 27, 2005
    2. Al-Bashir Hospital, Amman, Jordan, June 15, 2005
    3. University Hospital, University of Jordan, Amman, Jordan, April 15, 2005
21. “Proteomics: the future of biomedicine. Concept, technology, and biology”
    1. Al-Isra’ University, Amman, Jordan. September 13, 2004.
    2. Philadelphia University, Jerash, Jordan. December 1, ‏2004.
    3. University of Sultan Qaboos, Muscat, Oman, December 11, 2004.
    4. Mu'tah University, Mu'tah , Jordan, January 16, 2005
22. “Biological and technological outlooks in proteomics.” Hillman Cancer Center, University of Pittsburgh Cancer Institute, Pittsburgh, Pennsylvania. June 8, 2004.
23. “Proteomics-based biology: prostate cancer, shedding, etc.” Center for Biomedical Research, University of Texas Health Science Center at Tyler, Tyler, Texas. December 1, 2003.
24. “Linking proteomics to biology: prostate cancer etc.” Perinatology Research Branch, National Institute of Child Health and Human Development, Wayne State University, Detroit, Michigan. September 22, 2003.
25. “Integrative tools in the post-genomic era.” Perinatology Research Branch, National Institute of Child Health and Human Development, Wayne State University, Detroit, Michigan. September 23, 2003.
26. “Progression of prostate cancer through molecular profiling”. Cancer Research Institute, University of south Alabama, Mobile, AL. August 11, 2003.
27. "A road to a comprehensive look at prostate tumorigenesis: proteomically speaking". Program in Prostate Cancer Research, Department of Urology, Fred Hutchinson Cancer Center, University of Washington, Seattle, Washington, January 16, 2003.
28. “Proteomics in prostate cancer.” Large Scale Proteomics Corporation, Germantown, Maryland, July 11, 2001.
29. “Molecular profiling in prostate cancer: a proteomic approach.” Myriad Genetics Inc., Salt Lake City, Utah, June 26, 2001.
30. “Proteomic Approaches in Prostate Cancer: A Molecular Profiling Strategy.” Pacific Northwest national Laboratory, Richland, Washington, June 18, 2001.
31. “Molecular profiling and discovery approaches in prostate cancer using proteomics technology.” American Association for Cancer Research, New Orleans, Louisiana. March 27, 2001.

# Meeting presentations

1. **Ahram M**. “Towards Establishing a Multiple Sclerosis Biobank in Jordan”. The 5th International Jordanian Congress of Allergy & Immunology. Amman, Jordan, May 28-30, 2014.
2. **Ahram M**. “Perception of biobanking and biomedical research in Jordan”. Biobanking: Establishing the first Cancer Biobank in Jordan. Amman, Jordan. April, 10-11.2014.
3. **Ahram M**. “Biomedical Research and Biobanking in Jordan: Public Support, Consent Preference, and Influential Factors.” 2013 Jordan Society for Medical Laboratory Sciences (JSMLS) Annual Meeting. Amman, Jordan, March 23-25, 2013.
4. Zaza Z, El-Khateeb M, **Ahram M**. Association of MERTK and TYK2 with Multiple Sclerosis in Jordanian Patients. 2013 Jordan Society for Medical Laboratory Sciences (JSMLS) Annual Meeting. Amman, Jordan, March 23-25, 2013.
5. Ibayyan L, El-Khateeb M, **Ahram M**. Genetic Variations of Il-7R and Il-2R in Jordanian Multiple Sclerosis Patients. 2013 Jordan Society for Medical Laboratory Sciences (JSMLS) Annual Meeting. Amman, Jordan, March 23-25, 2013.
6. Ibayyan L, **Ahram M**, El-Khateeb M. Genetic variations of IL-7R and IL-2R among Jordanian Multiple Sclerosis patients. The 4th International Jordanian Congress of Allergy and Immunology. The Jordanian Society of Allergy and Immunology. Amman, Jordan. September 19-21, 2012.
7. Zaza R, **Ahram M**, El-Khateeb M. Investigation of MERTK and TYK2 association with Multiple Sclerosis among Jordanian Patients. The 4th International Jordanian Congress of Allergy and Immunology. The Jordanian Society of Allergy and Immunology. Amman, Jordan. September 19-21, 2012.
8. Ahram, M. Knowledge, perception, attitude, and practice towards biomedical research and biobanking among Jordanians. 25th International Medical Convention, National Arab American Medical Association (NAAMA), June 26-30, 2011.
9. Ahram, M. Are Jordanians into biobanking? The 4th international Conference of the Jordanian Society of Pathology and Laboratory Medicine, Amman, Jordan. April, 14-16, 2011.
10. Ahram, M. Estimation of membrane proteins in the human proteome. The Second Advances in Cancer Research: From the Laboratory to the Clinic, American Association for Cancer Research, Amman, Jordan. March 7-10, 2010.
11. Ahram, M. Utilization of mass spectrometry in the discovery of shed proteins. The Second Advances in Cancer Research: From the Laboratory to the Clinic”, American Association for Cancer Research, Amman, Jordan. October 2-3, 2009.
12. Ahram, M. Utilization of mass spectrometry in the discovery of shed proteins. The Second Middle East and North Africa (MENA) Conference, King Hussein Institute for Biotechnology and Cancer in collaboration with National Cancer Institute, Duke University, and European School of Oncology, Amman, Jordan. October 2-3, 2009.
13. Ahram, M. Association between human herpesvirus 6 and Chlamydia pneumoniae and occurrence of multiple sclerosis. The 4th Science Day of the Faculty of Medicine, Mu'tah University. April 15, 2009.
14. **Ahram M**. Tumor heterogeneity in proteomics: biology vs. technology. The 5th Scientific day for Internal Medicine Department. Al-Basheer Hospital. March, 2009.
15. Ahram, M. Association between human herpesvirus 6 and Chlamydia pneumoniae and occurrence of multiple sclerosis. The 2nd International Jordanian-Egyptian Biotechnology Conference. Yarmouk University, Irbid, Jordan. November 11-13, 2008.
16. Ahram, M. Tumor heterogeneity in proteomics: biology vs. technology. Contemporary and New Advances in Oncology. The 6th International Jordan Oncology Society Conference In Collaboration with the Arab Medical Association Against Cancer. Amman, Jordan. November 6-8, 2009.
17. Ahram, M. Validation proteomics biomarkers in prostate and esophageal cancers. Advances in Cancer Research: From the Laboratory to the Clinic, King Hussein Bin Talal Convention Center, Dead Sea, Jordan, March 16-19, 2008
18. Ahram, M. Discovery and validation of prostate cancer biomarkers. KHCBI-NCI-Duke University-Middle East and North Africa Cancer Research Conference, September 3-4, 2007.
19. Ahram, M. New technologies in diagnostic medicine. The 3rd conference of Jordanian Medical Faculties, Faculty of Medicine, Mu’tah University, April 6-7, 2007.
20. **Ahram M**. Proteomic discovery of disease biomarkers. The 1st Egyptian-Jordanian Conference on Biotechnology and Sustainable Development: Current Status and Future Scenarios, National Research Center, Cairo, Egypt, December 11-14, 2006.
21. **Ahram M**. Proteomic discovery of disease biomarkers. The 2nd JSP International Conference, Jordan Society of Pathology and Laboratory Medicine, Amman, Jordan, August 31-September 3, 2006.
22. **Ahram M**. Estimation of membrane proteins in the human proteome. The 20th International Medical Convention, The National Arab American Medical Association, Amman, Jordan, July 1-6, 2006.
23. **Ahram M**. Technical aspects in protein discovery by two-dimensional electrophoresis and Laser Capture Microdissection. Laser Capture Microdissection and macromolecular analysis of normal development and pathology, National Institutes of Health, Bethesda, Maryland, July 17-18, 2001.
24. **Ahram M**, Flaig MJ, Gillespie JW, Shu H, Duray PH, Linehan M, Zhao Y, Petricoin EF, and Emmert-Buck MR. Molecular profiling and discovery approaches in prostate cancer using proteomics technology. American Association for Cancer Research, New Orleans, Louisiana. March 27, 2001.
25. **Ahram M**, Sameni M, Linebaugh B, and Sloane BF. Cathepsin B in Rac1-induced cell invasion: Role in intracellular proteolysis of the extracellular matrix. Twenty-Sixth Annual Pharmacology Research Colloquium; Medical College of Ohio, Toledo, Ohio. June 19, 1998.
26. **Ahram M**, Sameni M, and Sloane BF. A connection between the GTP-binding protein and cathepsin B? First Annual Wayne State University School of Medicine Graduate Student Research Day; Detroit, Michigan. September 12, 1997.
27. **Ahram M**. Do Ras and Rac1 GTPases alter trafficking of cathepsin B? Twenty-Fourth Annual Pharmacology Research Colloquium; Michigan State University, East Lansing, Michigan. June 26, 1996.

# Educational and awareness lectures

11/2014 “Literature Review” for medical students. Faculty of Medicine, The University of Jordan, Amman, Jordan.

9/2014 “Literature Review” for dental students. Faculty of Dentistry, The University of Jordan, Amman, Jordan.

06/2014 “Proposal writing” for medical students. Faculty f Medicine, The University of Jordan, Amman, Jordan.

1/2014 “Literature review & Research dissemination” for medical students, The Hashemite University, Amman, Jordan.

12/2013 “Scientific research”. Career Day. Al-Raed Al-Arabi School, Amman, Jordan.

10/2013 “Research dissemination”. International Federation of Medical Students Associations, Amman, Jordan.

10/2013 “Let’s all evolve”. Faculty of Medicine, The University of Jordan, Amman, Jordan.

4/2013 “I am smarter than cancer”. Al-Raed Al-Arabi School. A lecture for 10th and 11th grade students.

2/2013 “Scientific research in the field of multiple sclerosis: rights and responsibilities”. The Jordanian Multiple Sclerosis Society, Amman, Jordan.

2/2012 “Literature Review” for dental students. Faculty of Dentistry, The University of Jordan, Amman, Jordan.

10/2012 “Literature Review” for medical students. Faculty of Medicine, The University of Jordan, Amman, Jordan.

# Patents

“Direct Cell Target Analysis.” A provisional US patent application, inventors: Mamoun Ahram and Michael Emmert-Buck (<http://www.uspto.gov/>; Pub. No / Pub. Date 20050176068 / 11-Aug-2005)