

Curriculum vitae

Name : Layla J.R Al-Mansoori

Nationality : Qatari

Current Position : Senior Research assistance in metabolic diseases
Biomedical Research Center / Qatar University.

Languages: Arabic, English.

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Education:

1999: Bachelor degree in Biomedical science / Qatar University.

2010 : Master of science "MSc" in Biochemistry. King Saud University, KSA.

The title of the project: *Molecular Mechanism of Ukrain and Taxotere in Breast Cancer Cells.*

Methods involved:

1. Animal cell culture.
2. Isolation or extraction of cellular protein and RNA from mammalian cell lines, used for several applications as SDS-PAGE and western blot analysis, PCR and cDNA expression array (Macroarray).
3. Different methods to examine cell viability, early and/or late apoptosis as . 7Aminoactinomycin D assay method, Annexin V binding assay and detection of DNA laddering and Tunnel assay.

In addition to several other techniques and methods practiced through the collaborative project with KFSH & RC "breast cancer stem cell proteomic".

These include:

- Digestion and processing of breast tissue biopsy sample into single cells.
- Isolation and enrichment of mammary progenitor/stem cell using fluorescent activated cell sorting analysis.
- 2D-PAGE combined with MALDI-TOF-MS proteomics.

2010-2013: Joined a PhD program in Laboratory Medicine and Pathobiology (LMP)/ University of Toronto, involved working on an embryonic stem cells and differentiation to osteogenic lineage, Propagating and maintaining the pluripotent mouse embryonic stem cells.

Teaching experience :

General Chemistry , Analytical Chemistry , Organic Chemistry & Biochemistry courses.

Publications, Short Courses and Conferences Attended

2002 : Fundamentals of Conducting Research symposium / King Faisal Specialist Hospital & Research Centre.

2003 : Introductory course in Biostatistics / King Faisal Specialist Hospital & Research Centre.

2006 : The founding conference for expatriate Arab scientist. / Doha-Qatar.

Al-Mansouri L J., Alokail M S. (2006). Molecular basis of breast cancer. Saudi Med J, 27(1):9-16.

2007: Coordinated the first proteomic work shop “ Workshop on Proteomics: Isolation, Purification and Characterization of Proteins and Enzymes” with Prof. Malcolm Potts. Department of Biological Sciences- Qatar University. June 18th-21st, 2007.

2008: Al-Okail MS, ***Al-Mansouri LJ***, Bin Amer SS. Gene array analysis of breast cancer cell lines Treated with Taxotere and Ukrain. Advances in Cancer Research: From the Laboratory to the Clinic, March 16 - 19, 2008, King Hussein Bin Talal Convention Center, Dead Sea , Jordan .

2009 : Al-Okail MS, ***Al-Mansouri LJ***, Bin Amer SS. Molecular mechanism effect of taxotere and ukrain in cell cycle regulating genes in positive and negative breast cancer cell lines. Annual Meeting of American Society of Biochemistry and Molecular Biology. 18-22, April, 2009. New Orleans , USA .

2009: Attended the First conference on Stem Cell held at the college of medicine, King Saud University Riyadh-KSA. 7-9 Nov. 2009.

2011: Alaiya AA, Al-Mohanna M, Aslam M, Shinwari Z, ***Al-Mansouri L***, AlRodayan M, Al-Eid M, Ahmad I, Hanash K, Tulbah A, Bin Mahfooz A, Adra C. (2011). Proteomics-based signature for human benign prostate hyperplasia and prostate adenocarcinoma. Int J Oncol. 38(4):1047-57.

2012: ***Al-Mansoori LJ***, Yu YS, Dziak E, and Opas M. Optimization of embryonic stem cell osteogenic differentiation in vitro. Graduate Student Research Day 2012/ University of Toronto. Toronto, Canada.

2013: ***Al-Mansoori LJ***, Yu YS, Dziak E, and Opas M. Calreticulin enhances mouse embryonic stem cell osteogenic differentiation: a crucial role in RUNX2 nuclear localization and STAT1 phosphorylation. Tenth Calreticulin Workshop: The Endoplasmic Reticulum and Beyond in Health and Disease, April 10th – 14th, 2013 in Banff, AB, Canada.

2015:

Layla Al-Mansoori, Yanhong Yu, Michal Opas. Optimized osteogenic differentiation protocol from R1 mouse embryonic stem cells in vitro. Differentiation. Jan-Feb 2015;89(1-2):1-10.

2018:

Presented a talk titled “Production and molecular characterization of a novel CPG2 fusion protein to be used with pro-drugs in targeted cancer therapy” in the 3rd annual health cluster research forum- 21st- 22nd April 2018. Qatar-University.

Layla Al-Mansoori, Philip Elsinga and Sayed K. Goda. “Production and molecular characterization of a novel CPG2 fusion protein for targeted therapy”. 11th Annual Proteins & Antibodies Congress, 5th Annual Peptides Congress and 5th Biosimilars & Biobetters Congress, 16th – 17th April 2018, London, UK.

2019: course “Laboratory animal science course” 14th Jan-6th Feb” Groningen University- Netherlands.

Layla Al-Mansoori, Alanod D AlQahtani , Sara Bashraheel, Fatma B Rashidi, Afrah Al-Yafei, Philip Elsinga, Alexander Domling, Sayed Kamel Goda. Production of “biobetter” glucarpidase variants to improve drug detoxification and antibody directed enzyme prodrug therapy for cancer treatment. Eur J Pharm Sci. 2019 Jan 15;127:79-91.

2020:

Layla Al-mansoori, Sara S. Bashraheel, Alanod D. Al Qahtani, C. David O'Connor, Philip H. Elsinga, Sayed K Goda. In vitro studies on CNGRC-CPG2 fusion proteins for ligand- directed enzyme prodrug therapy for targeted cancer therapy. Oncotarget. 2020 Feb 11;11(6):619-633.

Layla Al-Mansoori, Hend Al-Jaber, Aisha Y.Madani, Nayef A.Mazloum, Abdelali Agouni, Manjunath Ramanjaney, Abdul-Badi Abou-Samra, Mohamed A.Elrayess. Suppression of GATA-3 increases adipogenesis, reduces inflammation and improves insulin sensitivity in 3T3L-1 preadipocytes. Cell Signal. 2020 Aug 11;75:109735.

Hend Al-Jaber, **Layla Al-Mansoori**, Mohamed A Elrayess. GATA-3 as a potential therapeutic target for insulin resistance and type 2 diabetes mellitus. Curr Diabetes Rev. 2020 Jul 5.

Layla Al-Mansoori, Alanod D Al Qahtani, Philip Elsinga and Sayed K Goda. Production of long-acting CNGRC-CPG2 fusion proteins: New derivatives to overcome drug immunogenicity of ligand directed enzyme prodrug therapy for targeted cancer treatment. Front. Mol. Biosci. “Under review”.

Layla Al-Mansoori, Philip Elsinga and Sayed K Goda. Bio-vehicle carriers of protein therapeutics and cancer-specific targets for precision delivery of cancer cytotoxic drugs. Front. Bioeng. Biotechnol. “Under review”.

Zahara Alvandi, **Layla Al-Mansoori** and Michal Opas. Calreticulin regulates Src kinase in osteogenic differentiation from embryonic stem cells. Stem Cell Res. “Under review”.

Ilhame Diboun, **Layla Al-Mansoori**, Hend Al-Jaber, Omar Al-bBagha, Mohamed A Elrayess, Metabolomics of non-obese insulin resistant females reveals alterations in steroids, fatty acids and gut-microbiome. J Clin Endocrinol Metab. “Under review”.