



Dr. Amani Yousef Owaidah

Assistant Professor

Personal Data

Nationality | Saudi

Department | Clinical Laboratory Sciences

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Language Proficiency

Language	Read	Write	Speak
Arabic	Advanced	Proficient	Advanced
English	Advanced	Advanced	Advanced

Academic Qualifications (Beginning with the most recent)

Date	Academic Degree	Place of Issue	Address
May 13, 2014	PhD	University of Bristol	Bristol, United Kingdom
Oct 13, 2009	MSc with Merit in Transfusion and Transplantation Sciences	University of Bristol	Bristol, United Kingdom
Sep 8, 2004	BSc Medical Laboratory Sciences	King Faisal University	Dammam, Saudi Arabia

PhD, Master or Fellowship Research Title: (Academic Honors or Distinctions)

PhD	Cellular and Molecular Medicine (Stem Cell Biology and Cartilage tissue engineering)
Master	MSc with Merit in Transfusion and Transplantation Sciences

Professional Record: (Beginning with the most recent)

Job Rank	Place and Address of Work		Date
Assistant Professor	University of Dammam	Dammam, Saudi Arabia	September 2014-present
Research Scientist	King Fahd Specialist Hospital	Dammam, Saudi Arabia	August 2015- July 2016
Senior Technologist (Blood Bank)	King Fahd Military Medical Complex	Dhahran, Saudi Arabia	April 2007- April 2008



Junior Technologist (Blood Bank)	King Fahd Military Medical Complex	Dhahran, Saudi Arabia	December 2004- April 2007
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Scientific Achievements

Published Refereed Scientific Researches

(In Chronological Order Beginning with the Most Recent)

#	Name of Investigator(s)	Research Title	Publisher and Date of Publication
1	Amani Owaidah and Wael Kafienah	<ul style="list-style-type: none"> Cartilage Tissue Engineering Using Embryonic Stem Cells, Reference Module in Biomedical Sciences. 	Elsevier/ August 24, 2016 doi:10.1016/B978-0-12-801238-3.99808-8

Contribution to Scientific Conferences and Symposia

#	Conference Title	Place and Date of the Conference	Extent of Contribution
1	Saudi Society of Transfusion medicine	Jeddah, Saudi Arabia April 2016	Speaker
2	1 st Saudi Immunohematology group meeting	Dammam, Saudi Arabia December 2015	Speaker and Moderator
3	Advances in Molecular Biology	Dammam, Saudi Arabia October 2014	Speaker
4	Stem Cell Symposium	Cardiff, United Kingdom January 2014	Speaker
5	International Cartilage Repair Society (ICRS) 11 th congress	Izmir, Turkey September 2013	Speaker
6	2 nd update in Laboratory Medicine Meeting	Dammam, Saudi Arabia April 2013	Speaker
7	2 nd SouthWest Regional Regenerative Medicine Meeting	Bristol, United Kingdom September 2012	Speaker
8	International Cartilage Repair Society (ICRS) 10 th congress	Montreal, Canada May, 2012	Speaker

Scientific Awards

- Certificate of excellence by the Saudi Society of Genome and Molecular Oncology (SSGMO) December 2013.
- Distinguished Saudi scholars in a ceremony held at the Royal Embassy of Saudi Arabia by HRH Prince Mohammed bin Nawaf Al-Saud (Saudi Ambassador to the United Kingdom) in September 2012.



Membership of Scientific and Professional Societies and Organizations

- Chairperson of Red cell Immunohematology group of the Saudi Immunohematology Discussion group

Teaching Activities

Undergraduate

Course Coordination

#	Course Title and Code	Coordination	Undergrad.	From	to
1	Clinical Blood Banking	Course coordinator	4 th year	Sep 18-2016	Jan-26,2017

Student Academic Supervision and Mentoring

#	Level	Number of Students	From	to
1	4 th year	1 student	Sep 18, 2016	June 15, 2017

Personal Key Competencies and Skills: (Computer, Information technology, technical, etc.)

- **Cell culture and cryo-storage** - Generation of human induced pluripotent stem cells (hiPSC) and bone marrow mesenchymal stem cells. Daily maintenance through the observation of cell health (visualization of cells with light microscope and culture media assessment) and then culture of cell lines (feeding, division/expansion and cryostorage).
- **Characterization of pluripotent stem cell and mesenchymal stem cells:** - A major stage in my PhD studies the characterization of the cell lines through quantitative PCR, immunofluorescence staining, immunohistochemistry and flow cytometry.
- **Stem cell differentiation studies** – After the successful maintenance of induced pluripotent stem cell cultures, the core of my PhD was to design differentiation protocol to induce chondrogenic differentiation in the human induced pluripotent stem cells. This required extensive understanding of embryonic development and cell signalling pathways.
- **3D Tissue engineering** – This was important to investigate the ability of the differentiated human induced pluripotent stem cells chondroprogenitors to generate a 3D cartilage construct suitable for cell-based therapies. The Stem Cell Biology group in the University of Bristol, using mesenchymal stem cells, polyglycolic acid scaffold and recombinant growth factors, developed the tissue engineering protocol. For the hiPSC, my PhD was to investigate the factors that induce its chondrogenic differentiation.
- **ELISA and colorimetric assay use and result processing** - This was important in the measurement of cartilage extracellular matrix components such as type I and type II collagens and sulphated proteoglycans.
- **Histology and immunohistochemistry** – These techniques were used to analyze the cellular morphology and the quality of the 3D tissue engineered cartilage using a wide range of stains. During my PhD I experienced in the development and optimization of immunohistochemistry stains.



- **Data analysis** – Throughout my PhD data analysis has been important. During my recent PhD studies the statistical package PRISM (v5.0c) was used to investigate within/between group trends.
- **Cell signaling experimentation** – Daily experimentation at the University of Bristol was the treatment of hiPSC with various factors to activate signaling pathways involved in the self-renewal and differentiation. This included the TGF β , BMP, FGF, and Activin signaling pathways.
- **Blood transfusion and blood banking skills** - During my work at King Fahd Military Medical Complex in Dhahran, I experienced all routine and specialized blood banking tests that included ABO +RH forward grouping, reverse grouping, Antibody screening and identification, direct and indirect antihuman globulin test, Compatibility testing, resolving ABO discrepancies, acid elution, pre-warm technique, saline replacement at 4°C, cold agglutinins, Type specific indirect antihuman globulin test TSIAT, Neutralization by pooled plasma and antigen typing).
- **Donor registry, selection and phlebotomy** – I installed a computerized programme for the donor registry at KFMMC. Along-side Mr Joseph Robinson (Blood bank supervisor) took decision role in donor selection.
- **Blood component preparation and storage**- during my time at KFMMC, blood component preparation and storage was an important task in my job description.
- **Generation and maintenance of lab records and statistics. Adhere to statutory health and safety requirements.**

Last Update

5/12/2016