

Curriculum Vita

Name: Sami Garallah Almalki
Current job: Assistant professor of Clinical & Translational Science
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Education:

- Doctor of Philosophy in Clinical and Translational Science, School of Medicine, Creighton University, Omaha, the United States of America (2017).
- Master of Health Sciences, Medical Laboratory Sciences (specialty-Biomedical Sciences), Quinnipiac University, Hamden, Connecticut, the United States of America (2010).
- Master of Science, Molecular and Cell Biology, Quinnipiac University, Hamden, Connecticut, the United States of America (2010).
- Bachelor of Science, Biochemistry Department, King Saud University, Riyadh, Saudi Arabia (2004).

Research Experience:

- Determination of the genes induced upon biotic and abiotic stresses such as fungi and boron, bachelor's degree thesis.
- Using MT as a biomarker for the detection and assessment of heavy metals in the Acanthocephalan after cadmium exposure, master's degree thesis, Quinnipiac University.
- Role of matrix metalloproteases (MMPs) on the differentiation of adipose derived mesenchymal stem cells into endothelial cells, and clinical implications for cardiovascular diseases (atherosclerosis).
- The effect of synthesized nanoparticles on tumor cells.
- Immunomodulatory roles of mesenchymal stem cells and clinical implications for asthma.

Work & Teaching Experience:

- Head of Chemistry Department - College of Science, Majmaah University (2017 – 2019).
- Assistant Professor of Clinical & Translational Sciences, Biology Department – College of Science, Majmaah University (2017 – 2019).
- Assistant Professor of Clinical & Translational Sciences, Department of Medical Lab. Sciences – College of Applied Medical Sciences, Majmaah University (2020 – present).
- Cell culturing: undergraduate students (summer program), Creighton University, Omaha, NE.
- Isolation of mesenchymal stem cells from bone marrow: graduate students, 2015 – 2017, Creighton University, Omaha, NE.
- Isolation of mesenchymal stem cells from adipose tissue: graduate and undergraduate students, 2015 – 2017, Creighton University, Omaha, NE.
- Introduction to molecular and cell biology: undergraduate students, 2016, Creighton University, Omaha, NE.
- Biology: undergraduate students, preparatory year program, 2017, Majmaah University, Zulfi.
- Cell biology: Department of Biology, 2018-2019, Majmaah University.
- Applied Medical Biochemistry: Department of Medical Lab. Sciences, 2020, Majmaah University.

Professional Activities:

- Peer reviewer, Journal of Brain Research (2017).
- Peer reviewer, The Universities and Future vision Conference (2017).
- Peer reviewer, Journal of Biomedicine and Pharmacotherapy (2018).
- Chairperson, 2nd research day – Biology Department – College of Science at Majmaah University (Molecular Immunology, Allergy, and Infection Research Group (MIAI)).
- Peer reviewer, Journal of Biomedical Materials Research: Part A (2020).

Attended training courses and workshops:

- Healthcare provider (CPR & AED) program: Life Support Training Center, King Fahad Medical City, Riyadh (Feb. 2011).
- IACUC Certification: Institutional Animal Care and Use committee Education Program, Creighton University, Omaha, NE (Oct. 2011).
- Financial Conflict of Interest training program (FCOI): National Institute of Health, Office of Extramural Research, Creighton University, Omaha, NE (Oct. 2011 & Oct. 2016).
- Successful Grant Writing Proposal: Workshop, Creighton University, Omaha, NE (2012).
- Effective Global Managers Training: Lawrence Technological University, Southfield, Michigan (2014).
- Cloud Collaboration in Modern Teaching: Deanship of Electronic and Distance Learning, Majmaah University, Zulfi (2017).
- Basic Live Support provider (BLS), National Health Care, Las Vegas, NV, USA (Aug. 2018).

Publications:

- **Almalki SG** and Agrawal DK, 2016, Key transcription factors in the differentiation of mesenchymal stem cells, *Differentiation*, 92(1-2):41-51.
- **Almalki SG** and Agrawal DK 2016, Effects of Matrix Metalloproteinases on the Fate of Mesenchymal Stem Cells, *Stem Cell Research and Therapy*, 7(1):129.
- Llamas Y, **Almalki SG**, and Agrawal DK, 2016, Vitamin D Machinery and Metabolism in Porcine Adipose-Derived Mesenchymal Stem Cells. *Stem Cell Research and Therapy*, 17;7(1):118.
- **Almalki SG**, Llamas Y, and Devendra K. Agrawal, 2017, MMP-2 and MMP-14 Silencing Inhibits VEGFR2 Cleavage and Induces the Differentiation of Porcine Adipose-Derived Mesenchymal Stem Cells to Endothelial Cells. *Stem Cells Translational Medicine*, 6(5):1385-1398.
- **Almalki SG**, and Agrawal DK, 2017, ERK Signaling is Required for VEGF-A/VEGFR-2-induced Differentiation of Porcine Adipose-Derived Mesenchymal Stem Cells into Endothelial Cells, *Stem Cell Research and Therapy*, 8(1):113.
- Jabli M, **Almalki SG**, Agougui H, 2019, An insight into methylene blue adsorption characteristics onto functionalized alginate bio-polymer gel beads with λ -carrageenan-calcium phosphate, carboxymethyl cellulose, and celite 545, *International Journal of Biological Macromolecules*, S0141-8130(19)35327-9.
- Syrine L, Jabli M, Abdessalem SB, **Almalki SG**, 2020, FT-IR spectroscopy and morphological study of functionalized cellulosic fibers: Evaluation of their dyeing properties using biological Pistacia vera hulls by-product extract, *International Journal of Biological Macromolecules*, 145:1106-1114.
- Sarra Chortania, Hayet Edziri, Marwa Manachou, Youssef O.Al-Ghamdi, **Sami G. Almalki**, Yaser E. Alqurashi, Hichem Ben Jannet, Anis Romdhane, 2020, Novel 1,3,4-oxadiazole linked

benzopyrimidinones conjugates: Synthesis, DFT study and antimicrobial evaluation, Journal of Molecular Structure, Volume 1217:128357.

- MaherCherif, MabroukHorchani, Youssef O.Al-Ghamdi, **Sami G.Almalki**, Yaser E.Alqurashi, HichemBen Jannet, AnisRomdhane, 2020, New pyrano-1,2,3-triazolopyrimidinone derivatives as anticholinesterase and antibacterial agents: Design, microwave-assisted synthesis and molecular docking study, Journal of Molecular Structure, Volume 1220:128685.
- Zinoubi, K., Chrouda, A., Soltane, R., Al-Ghamdi, Y.O., **Almalki, SG**, Osman, G., Barhoumi, H. and Jaffrezic Renault, N, (2020), Highly Sensitive Impedimetric Biosensor Based on Thermolysin Immobilized on a GCE Modified with AuNP-decorated Graphene for the Detection of Ochratoxin A. Electroanalysis. doi:10.1002/elan.202060247.
- MahjoubJabli, Youssef O.Al-Ghamdi, NouhaSebeia, **Sami G.Almalki**, WaelAlturaiki, Jamal M.Khaled, Ayman S.Mubarak, Faisal K.Algethami, 2020, Green synthesis of colloid metal oxide nanoparticles using Cynomorium Coccineum: Application for printing cotton and evaluation of the antimicrobial activities, Materials Chemistry and Physics, Volume 249:123171.
- **Sami G. Almalki** (2020) Mesenchymal Stem Cells and Cutaneous Wound Healing: Potential Clinical Applications in Tissue Repair and Regeneration. Tissue Engineering and Regenerative Medicine. (In process).

Participation at Conferences (Published abstracts):

- ATVB Conference, "Expression of Matrix Metalloproteases during the Differentiation of Porcine Adipose-derived Mesenchymal Stem Cells to Endothelial Cells", May 1-3, 2013, Orlando, FL.
- St. Albert's Day, "Role of Matrix Metalloproteases during the Differentiation of Porcine Adipose-derived Mesenchymal Stem Cells to Endothelial Cells", Mar 2014, Creighton University, Omaha, NE.
- Experimental Biology conference, "MMP-2 and MT1-MMP Silencing induces the Differentiation of Porcine Adipose-Derived Mesenchymal Stem Cells to Endothelial Cells", Mar 2015, Boston, MA.
- St. Albert's Day, "MMP-2 and MT1-MMP Silencing induces the Differentiation of Porcine Adipose-Derived Mesenchymal Stem Cells to Endothelial Cells", Apr 2015, Creighton University, Omaha, NE.
- St. Albert's Day, "1,25-dihydroxy vitamin D enhances VEGF-Stimulated Porcine Adipose-Derived Mesenchymal Stem Cells Toward the Endothelial Phenotype", Apr 2015, Creighton University, Omaha, NE (Second author).
- ATVB conference, "1,25-dihydroxy vitamin D enhances VEGF-Stimulated Porcine Adipose-Derived Mesenchymal Stem Cells Toward the Endothelial Phenotype Involving Wnt/ β -catenin Pathway", May 2015, San Francisco, CA (Second author).
- International Academy of Cardiovascular Sciences, "Endothelial cell Differentiation of Porcine Adipose-Derived Mesenchymal Stem Cells is regulated by the Expression of MMP2 and MMP14", Sep. 2015, Omaha, NE.
- St. Albert's day, "Role of Matrix Metalloproteases in the Endothelial Cell Differentiation of Porcine Adipose-Derived Mesenchymal Stem Cells", April 2016, Creighton University, Omaha, NE.
- 4TH Stem cells and cellular therapy, "VEGFR2/ERK signaling is critical for The Differentiation of adipose-derived mesenchymal stem cells to endothelial cell", October 2018, King Abdullah International Medical Research Center, Riyadh, Saudi Arabia.

Recognition awards:

- Best poster (clinical sciences category), St. Albert's Day, "MMP-2 and MT1-MMP Silencing induces the Differentiation of Porcine Adipose-Derived Mesenchymal Stem Cells to Endothelial Cells", Apr 2015, Creighton University, Omaha, NE.
- Morris Karmazyn Award for best poster in Translational Medicine. International Academy of Cardiovascular Sciences, "Endothelial cell Differentiation of Porcine Adipose-Derived Mesenchymal Stem Cells is regulated by the Expression of MMP2 and MMP14", Sep. 2015, Omaha, NE.
- Third place in 3-Minutes thesis competition (3-MT), Feb. 2016, Creighton University, Omaha, NE.