

Doa'a Ghazi Fale Al-u'datt

Assistant Professor of Physiology and Pharmacology

Personal

Date of Birth: 24th October, 1987
Nationality: Jordanian/Canadian
Marital Status: Married
Address: Department of Physiology and Biochemistry, Faculty of Medicine, Jordan University of Science and Technology, Jordan.
Telephone: +962775284522 or +962799912993
E-mail: Doaa.al-udatt@umontreal.ca or dgaludatt@just.edu.jo

Education

2016-2019 **Doctor of Philosophy** (Cumulative GPA: 4.3) Montreal Heart Institute, Department of Pharmacology and Physiology, Faculty of Medicine, University of Montreal, Quebec, Canada.

Dissertation: LOX and LOX-Like Proteins as Potential Therapeutic Target for Atrial Fibrillation.

2015-2016 **Master of Science** (Cumulative GPA: 3.7) Montreal Heart Institute, Department of Pharmacology and Physiology, Faculty of Medicine, University of Montreal, Quebec, Canada.

Dissertation: Effect of Angiotensin Receptors in Cardiac Fibroblast Physiology and Pathology through NO Pathways. Switch to PhD Program

2005-2010 **Bachelor of Dentistry** (Cumulative Average: 78.9%, Very Good) Faculty of Dentistry, Jordan University of Science and Technology, Jordan.

-19th order from 155 students on Faculty of Dentistry.

2004-2005 **Jordanian Tawjahi:** High School; Almogyer High School (Cumulative Average 93.4%).

-187 order on Tawjahi student in Hashemite Kingdom of Jordan for 2004/2005.

Experience

2020-Now **Assistant Dean**, Faculty of Medicine, Jordan University of Science and Technology, Jordan.

- 2019-Now** **Assistant Professor**, Department of Physiology and Biochemistry, Faculty of Medicine, Jordan University of Science and Technology, Jordan.
- 2015–2016** **Graduate Research Assistant**, Montreal Heart Institute, Department of Pharmacology and Physiology, Faculty of Medicine, University of Montreal, Quebec, Canada.
- 2011-2014** **Dentist**, Sanabel Alnour Center (Clinic), Alnoimeh-Irbid, Jordan.
- 2010-2011** **Dentist**, Excellence or Training at Ministry of Health (Amman, Jordan).
- Training at Princess Basmeh Hospital.
- Training at Sareh Health Center.

Research Interests

I have professional expertise in the area of:

- Cardiovascular Physiology
- Cardiovascular Electrophysiology
- Cardiovascular Pharmacology
- Cardiovascular Biochemistry
- Biochemistry
- Physiology.
- Pharmacology.

Research Grants

1. Jordan University of Science and Technology: ‘‘ Effect of dietary phytosomes supplement of phytochemical plants extracted from hibiscus sabdariffa and cinnamomum verum on hypertensive Sprague-Dawley rats.’’ 8000 JD (2019-2020).
2. Jordan University of Science and Technology: ‘Circulating profibrotic markers as potential predictors for atrial fibrillation’’ 9100 JD (2019-2021).
3. Jordan University of Science and Technology: ‘‘ Characterization of intracellular and extracellular roles for transglutaminases (TGs) in regulating cardiac fibroblast and myocyte functions’’ 8000 JD (2020-2022).
4. Jordan University of Science and Technology: ‘Roles of peptidylarginine deiminase (PAD 2 and 4) in cardiac fibrosis’’ 60,000 JD (2020-2022; under process).
5. Jordan University of Science and Technology: ‘Impact of derived nano particle on cardiac remodeling’’ 8000 JD (2020-2022).
6. Jordan University of Science and Technology: ‘Effect of orally-administrated fermented bioactive peptides derived from royal jelly on diabetic cardiomyopathy rats’’ 8000 JD (2020-2022).

7. Jordan University of Science and Technology: 'Effect of pharmacologic inhibition of transglutaminase on cardiac remodeling in heart failure rats.' 8000 JD (2020-2022).

Teaching

✓ Undergraduate Courses

- Human Physiology.
- Human Physiology (LAB).
- Physioanatomy (LAB).
- Human Physiology LAB for Dentistry.
- Physiology of Respiratory System.
- Medical Terminology.

✓ Graduate Courses

- Advanced Human Physiology.
- Advanced Endocrinology.
- Advanced Topics in Physiology

Graduate (Master) Student Supervision

- Jenan Alqabalat (2019).
- Sarah Abu Sarah (2020).
- Dana Alkhateeb (2019).
- Mais Abubaker (2019).
- Nour Alzoubi (2019).
- Yasmen Alwadiyan (2019).
- Haneen Alrashdan (2020).
- Dana Alsaman (2020).

Refereeing Activity

- European Journal of Pharmacology.
- Basic Research in Cardiology.
- Cardiovascular Research.
- Journal of the American College of Cardiology.
- Journal of Nutritional Biochemistry.
- Progress in Cardiovascular Diseases.
- Circulation.
- Journal of Physiology.

- Biomedicine & Pharmacotherapy

Publications

Published Peer Reviewed Journal Articles

1. **Al-U'datt, D. G.**, Allen, B. G., Hiram, R., & Alrabadi, N. (2021). Current knowledge into the role of the peptidylarginine deiminase (PAD) enzyme family in cardiovascular disease. *European Journal of Pharmacology*, 891, 173765.
2. Alrabadi, N., Al-Rabadi, G. J., Maraqa, R., Sarayrah, H., Alzoubi, K. H., Alqudah, M., & **Al-u'datt, D. G.** (2020). Androgen effect on body weight and behaviour of male and female rats: novel insight on the clinical value. 52(10), e13730.
3. Alu'datt, M. H., **Al-U'datt, D. G.**, Tranchant, C. C., Alhamad, M. N., Rababah, T., Gammoh, S., Almajwal, A., & Alli, I. (2020). Phenolic and protein contents of differently prepared protein co-precipitates from flaxseed and soybean and antioxidant activity and angiotensin inhibitory activity of their phenolic fractions. *NFS Journal*.
4. Gammoh, S., **Alu'datt, M. H.**, Tranchant, C. C., Al-U'datt, D. a. G., Alhamad, M. N., Rababah, T., Kubow, S., Haddadin, M. S. Y., Ammari, Z., Maghaydah, S., & Banat, H. (2020). Modification of the functional and bioactive properties of camel milk casein and whey proteins by ultrasonication and fermentation with *Lactobacillus delbrueckii* subsp. *lactis*. *LWT*, 129, 109501.
5. **Al-u'datt, D.**, Al-Husein, B. A. A., & Qasaimeh, G. R. (2017). A mini-review of c-Met as a potential therapeutic target in melanoma. *Biomed Pharmacother*, 88, 194-202.
6. **Al-u'datt, D.**, Allen, B. G., & Nattel, S. (2019). Role of the lysyl oxidase enzyme family in cardiac function and disease. *Cardiovasc Res*, 115(13), 1820-1837.

7. Hiram, R., Naud, P., Xiong, F., **Al-u'datt, D.**, Algalarrondo, V., Sirois, M. G., Tanguay, J. F., Tardif, J. C., & Nattel, S. (2019). Right Atrial Mechanisms of Atrial Fibrillation in a Rat Model of Right Heart Disease. *J Am Coll Cardiol*, 74(10), 1332-1347.
8. **Alu'datt, M. H.**; Rababah, T. M.; Alhamad, M. N.; Gammoh, S.; Ereifej, K.; Al-Mahasneh, M.; Al-u'datt, D.; Nai-mi, O.; Hussein, N. H.; Kubow, S. (2017). Chapter 10: Application of virgin olive oil as nutraceutical and pharma-ceutical food: Composition and bio-functional constituents and their roles in functionality, therapeutic and nutraceuti-cal properties. In: Soft chemistry and food fermentation (Handbook of Food Bioengineering, Volume 3), Ed. Alexandru Mihai Grumezescu and Alina Maria Holban, Elsevier (Academic press). PP.265-298.

Journal Articles Under Review

1. **Al-u'datt, D.**, Hiram, R., Daquette, N, Shi, Y., Tardif, J.-C., Sirois, M. G., Allen, B., Nattel, S. (2020). The lysyl oxidase protein signaling pathway in atrial fibrosis and fibrillation. preparation for submission for *Circulation. Under submission.*
2. **Al-u'datt, D.**, Xiao, J., Naud, P., Allen, B., Nattel, S. (2020). Characterization of matrix-dependent and matrix-independent roles for lysyl oxidase (LOX) and LOX-like proteins (LOXL) in regulating cardiac fibroblast and myocyte functions. Under preparation for submission *Cardiovascular Research. Under submission.*
3. Alu'datt, M. H.; **Al-U'datt, D. G.**; Alhamad, M. N.; Rababah, T.; Gammoh, S.;Althnaibat, R. M.; Kubow, S. (2020). Antioxidant, antidiabetic and antihypertensive properties of peptide fractions isolated from freeze-dried and sun-dried cow's milk jameed. *Food Hydrocolloids, Under review.*

4. **Al-U'datt, D. G.,** Allen, B. G. (2021). Implications of enigmatic transglutaminase 2 (TG2) enzyme in cardiac disease and therapy: A narrative review of contemporary findings. *Cardiovascular Research. Under review.*

Conference Presentations

1. **Al-u'datt, D.,** Allen, B., Nattel, S. (2019). Characterization of Extracellular Matrix-dependent Roles for lysyl oxidase (LOX) and LOX like (LOXL) Proteins in Regulating Cardiac Fibroblast Functions. Paper presented at the Annual Meeting of the AABMS-19; International Centre of Excellence in Chemical, Agricultural and Biological Sciences. Nov. 12-14, 2019 Paris, France.

Research Experience

- Knowledge and an experience in Dr. Stanely Nattel research fields (Montreal Heart Institute, University of McGill, and University of Montreal) including reading and writing research proposal related to area of pharmacology and physiology.
- Gain an experience in techniques related medical sciences (biochemistry, physiology, and pharmacology; Montreal Heart Institute, University of McGill and University of Montreal) including:
 - Immunohistochemistry.
 - Electron microscope
 - DNA extraction
 - Western blot.
 - ELISA.
 - PCR.
 - qPCR.
 - Cell culture.
 - Animal experimentation.
 - Drug treatment.
 - Spectrometry.
 - Electrophysiology.
 - And all other small techniques.

Administration

University Administration/Committees

- Member Department Graduate Committee 2020-2021
- Member Department research committee 2020-2021

Other Skills

Languages

- **Arabic:** Native language.
- **English:** Speaks fluently and read/ write with high proficiency.
- **French:** Basic.

Computer Skills

- **Languages:** FORTRAN, BASIC.
- **Applications:** MS Word, MS Excel, MS PowerPoint.
- **Statistical Software:** SAS, JMP.
- **GraphPad software (Prism), Image J., Image Pro.**

Professional Affiliations

- Member of Jordanian Dental Association (2010-now)

Scholarship and Awards

- **2016-2019** Scholarship from the Jordan University of Science and Technology to pursue graduate studies (Ph.D) in Canada.
- **2015-2016** Assistantship from Montreal Heart Institute (Dr. Stanley Nattel).
- **2005-2010** 19th order from 155 students on Faculty of Dentistry.
- **2004-2005** First order on Al-Mogyer Secondary School during 12 levels (Irbid-Jordan).

Honor List

- 2005-2006** Faculty Honor List for Year (Jordan University of Science and Technology).
- 2005** Higher Education Honor List.
- 2004** UNEP Award for Young Leadership for Arab countries.

WorkShop and Sessions

- Quality of Online Courses- Applying the Quality Matters Rubric (17-19 December, 2019).
- Research Excellence: From Application To Publication (15-16 January, 2020).

References

1. Prof. Stanley Nattel, MD

Department Pharmacology and Physiology
Medical School, Montreal university, Montreal, Canada
Montreal Heart Institute Research Center
5000 Belanger St. E., Montreal, Quebec H1T1C8, Canada
Editor-in-Chief for Canadian Journal of Cardiology
5000 Belanger St. E., Montreal, Quebec H1T1C8, Canada
Telephone: 514-376-3330/3990
Fax: 514-593-2493

stanley.nattel@icm-mhi.org

stanleynattel@gmail.com

2. Prof. Bruce G. Allen

Department Pharmacology and Physiology
Medical School, Montreal university, Montreal, Canada
Montreal Heart Institute Research Center
5000 Belanger St. E., Montreal, Quebec H1T1C8, Canada
Telephone LAB: 514-376-3330/3592
Telephone: 514-376-1355

Email: bruce.g.allen@umontreal.ca