

RESUME

Hatouf Sukkarieh, PhD

Assistant Professor of Pharmacology

College of Medicine

Alfaisal University

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Date of birth: Citizenship: American

Higher Education

- 1 **Institution:** Rutgers, the State University of New Jersey,
Graduate School of Biomedical Sciences,
Newark, New Jersey, USA
2009-2013
Qualification: **PhD in Pharmacology and Physiology (GPA: 3.5).**
- 2 **Institution:** Rutgers, the State University of New Jersey,
Graduate School of Biomedical Sciences,
Newark, New Jersey, USA
2007-2009
Qualification: **Master's degree in Pharmacology and Physiology.**
- 3 **Institution:** Lebanese American University, Byblos-Lebanon
2001-2002
Qualification: **Sixth Academic Year in Pharmacy.**
- 4 **Institution:** Applied Science University, Amman, Jordan
1994-1999
Qualification: **Bachelor's degree in Pharmacy.**

Hatouf

Doctoral Courses Completed

1. Research Methodology
2. Physiologic Principles A, B
3. Seminars in Physiology I and II
4. Experimental Physiology
5. Immunoglobulins in Host Defense
6. Core I and Core II in Systems Biology
7. Read Literature in Signaling
8. Therapeutics I,II,III and IV
9. Principles of Pharmacology I and II
10. Biostatistics I
11. Ethics in Science and Research

Work/Research Experience

Institution: Alfaisal University, College of Medicine, Riyadh, Saudi Arabia

Position: *Assistant Professor of Pharmacology*

Period: February 2018- present

Duties: (1) Teaching a variety of courses in Biomedical Sciences including Pharmacology and Physiology
(2) Senior tutor for problem-based learning (PBL) sessions in a variety of blocks (see list of courses taught below)
(3) Conducting high quality research in Pharmacology and Physiology
(4) director of graduate courses

Institution: King Saud Bin Abdul-Aziz University for Health Sciences (KSAU-HS), College of Medicine, Riyadh, Saudi Arabia

Position: *Assistant Professor of Pharmacology*

Period: December 2014- January 2018

Duties: (1) Teaching a variety of courses in Biomedical Sciences including Pharmacology and Physiology
(2) Senior tutor for problem-based learning (PBL) sessions in a variety of blocks (see list of courses taught below)
(3) Conducting high quality research in Pharmacology and Physiology

Institution: Rutgers, the State University of New Jersey, Graduate School of Biomedical Sciences, Department of Pharmacology and Physiology

Position: Research Assistant – PhD Student

Period: 2009 - 2013

Duties: (1) Transfecting DNA into TSA cell line using Calcium Phosphate Transfection Protocols

(2) Whole cell and Single Channel Patch-Clamping**(3) Performing Site Directed Mutations to L-Type Calcium Channels****Institution:** Merck – Amman, Jordan**Period:** 2002 - 2004**Duties:** **Professional Sales Representative: promotion of Fosamax once weekly. In addition, sales analysis exercise and presentation to the target physicians.****Institution:** Department of Marketing Planning, United Pharmaceutical Manufacturing Co. Ltd.**Period:** September 1999 - February 2001**Duties:** Assistant in the Marketing Planning Department**Courses Taught****Research Methodology****Pathogenesis of Disease**

1. Pharmacokinetics: VD and T1/2
2. Pharmacodynamics: Efficacy and Potency
3. Pharmacogenomics

Cardiovascular Block

1. Physiology: Autonomic Nervous System
2. Pathophysiology of Hypertension
3. Antiplatelet and anticoagulants

Musculoskeletal Block

4. Neuroadaptation and Dependence
5. Overview of Drugs in Arthritis: Understanding the role of prostaglandins and thromboxanes in pain, inflammation, fever and excessive blood clotting

Neuroscience Block

5. Neurotransmitters: Understanding the difference between the central neurotransmitters and neuromodulators – describing different receptor types for glutamate
6. Antipsychotics: Understanding the pathophysiology of Schizophrenia
7. Clinical Pharmacology of Old Age: Explaining the changes in elderly patients which will be reflected in drug pharmacokinetics and pharmacodynamics properties.
8. Antipsychotics
9. Anesthetics

Foundation Block

7. Introduction to Pharmacology
8. Metabolism of Drugs
9. Non-medical Uses of Drugs

Hematology Block

10. Medications in Pregnancy
11. Anticoagulant medication
12. Antiplatelet and thrombolytic medications

Gastrointestinal Block

13. Treatment of Peptic Ulcer

Respiratory Block

14. Pharmacology of COPD
15. Treatment of Asthma

Urology and Renal Block

16. Diuretics
17. Nephrotoxicity

Faculty and Administrative Responsibilities

1. Certified external reviewer by NCAAA
2. Director of the Research Methodology course – Graduate School
3. Quality Assurance Officer
4. Teaching and Block Coordination:
5. Senior tutor for problem-based learning (PBL) sessions for all of the above listed blocks. I have also given many lectures and seminars in Physiology and Pharmacology during my six-years of PhD training in the Graduate School of Biomedical Sciences at Rutgers University, New Jersey, USA.
6. Co-coordinator in the Gastroenterology and Nutrition block in the College of Medicine
7. Give numerous lectures in Pharmacology (all blocks) to medical students in professional year 3 and 4.
8. Directly involved in tutoring medical students in problem-based learning (PBL) for all blocks.
9. Involved in the co-coordination and lecturing in the midwifery pharmacology course as part of the Master's program at the College of Nursing.

Research Contributions

Principal investigator or co-investigator on numerous research projects conducted by College of Medicine students and faculty in a variety of areas including, but not limited to, Public Health/Epidemiology, Pharmacogenomics and link of drugs to patient metabolomic profile

Administrative Contributions

1. Head of pharmaceutical analytical service
2. Chairman of the proposal review committee/College of Medicine
3. Accredited external reviewer from NCAAA
4. Member in the Quality Assurance and Accreditation Committee at Alfaisal University
5. Chair of the College of Medicine's Faculty Development Committee (KSAU-HS)

Supervision of Graduate Students and Researchers

Ghaida Alkhatheeri- Alfaisal University, College of Medicine
 Turki Alsagoor – Alfaisal University, College of Medicine
 Maria Almanasef - Alfaisal University, College of Medicine
 Nuha Aboabat - Alfaisal University, College of Medicine
 Alaaa Damer - Alfaisal University, College of Medicine
 Lamia Alosaimi - Alfaisal University, College of Medicine
 Fatimah Alseedi - Alfaisal University, College of Medicine
 Rana Aldallan - Alfaisal University, College of Medicine
 Maha Albegami - Alfaisal University, College of Medicine
 Christina Pocsai – Biomedical Sciences, Pharmacology and Physiology
 William Smith - Biomedical Sciences, Pharmacology and Physiology
 Thomas Comollo - Biomedical Sciences, Pharmacology and Physiology

Lab Techniques:

1. **Calcium Phosphate Transfection:** a technique that introduces DNA into different cell lines through forming calcium phosphate precipitate along with the targeted DNA.
2. **Patch Clamping (whole cell and cell attached single channel):** a technique that measures current passing through a whole cell containing voltage gated channels (whole cell patch clamping). Also, measuring the current that passes through a single voltage gated channel (cell attached single channel).
3. **Site-directed Mutation:** a technique that allows researchers to mutate a site in the protein of interest.
4. **Maxi and Mini Preparations:** Both techniques are used to produce DNA on a large scale (Maxi) and a small scale (Mini) preparation.
5. **Transformation:** A technique used to introduce plasmid DNA into treated E-Coli bacteria. In turn, the bacteria growth in its optimum media increases DNA production.

Achievement in Research (Theses)

Doctoral Thesis:

Title: **Contribution of Asparagine and Phenylalanine Residues in the Permeability Pathway to Selectivity and Gating of Voltage-dependent Calcium Channels.**

Supervisor: Dr. Roman Shirokov, Associate Professor, Department of Physiology and Pharmacology, Rutgers, the State University of New Jersey, USA

Master's Thesis:

Title: **The Role of Leak Currents in Hypokalemic Periodic Paralysis**

Supervisor: Dr. Roman Shirokov, Associate Professor, Department of Physiology and Pharmacology, Rutgers, the State University of New Jersey, USA

Research Interests

Biomedical: Genetic-Related Channelopathies causing cardiovascular and neurological and diseases (e.g. Familial Hemiplegic Migraine and Timothy syndrome), Relationship between Cell cycle Mutated Proteins and Cancer (e.g. p53 mutations).

Epidemiology: Cancer Epidemiology and treatment, Infectious Disease Epidemiology and treatment, Diabetes, Cardiology and Neurology.

Pharmacogenomics and personalized medicine : I am interested in increasing the awareness of the importance of personalized medicine through genetic screening prior to drug delivery

Clinical: Anti-hypertensive drugs; e.g. ACE inhibitors used in the treatment of hypertension and diabetic nephropathy.

Grants:

1. Is there a role for vitamin D in diabetic nephropathy. Sukkarieh H, Ghaida Kathiri, Fathia Nabil, Aisha Kokar. IRG. SAR 50,000. I submitted the final report and my graduate student will be defending mid of January
2. Programmable RAPID intervention against Methicillin-resistant Staphylococcus aureus Hatouf H. Sukkarieh, Nils Walter, Atef Shibl/ SNIH, 2,000,000 In collaboration of University of Michigan. Awaiting the response from SNIH
3. A Distinctive Metabolomics Pattern Associated with The Administration of Combined Dose of Sacubitril/Valsartan to Healthy Subject - A Kinetic Approach. Hatouf H. Sukkarieh, Anas Abdel Rahman, Hana Fakhoury IRG grant #24337 100,000 SR

Submitted Publications:

- 1 Comparative Survival Analysis of Saudi Breast Cancer Patients with Secondary Thyroid Carcinoma
Hatouf H. Sukkarieh, Lara M. Samhan, Nida Mariyam, Rami Bustami, Doha Fatani, Osama Ammar, Taher Twegieri in Cancer treatment and research communications Q2
- 2 Barriers Facing Pharmaceutical Stakeholders to generating Real World Evidence studies [RWE] in Saudi Arabia: Experts Recommendation
Hatouf Sukkarieh, Nourah al Fayez , Nura O. Azmi, Bushra Syed, Raed A. Albar, Nawaf Al Bali in BMJ Open, Q2
- 3 Expanding the Role of Heparin Derivatives in Oncology: From Anticoagulation to Antitumor Activity" Holail, Jasmin Sukkarieh, Hatouf; Aljada, Ahmed ; in Therapeutic Advances in Medical Oncology.

Publications, Conference Contributions, Submitted Manuscripts and Technical Reports:

[Not in chronological order]

1. **Sukkarieh HH**, Husein TH, Bustami RT, Saleem RA, Alvi SN, Alodaib AN. Role of age and sex in the incidence of adverse effects among diabetic patients treated with glipizide. Exp Ther Med. 2024 Aug 6;28(4):391. doi: 10.3892/etm.2024.12680. PMID: 39161610; PMCID: PMC11332124.
2. Saleem RA, Ramadan M, Elshaaer Y, **Sukkarieh H**, Alissa R, Alhusseini N, Tamim H, Alshahrani A, Almaimoni H. Laboratory features and pharmacological management of early and late-onset primary Sjögren's syndrome. Rheumatol Int. 2024 Jul;44(7):1317-1325. doi: 10.1007/s00296-024-05626-0. Epub 2024 Jun 5. PMID: 38839658; PMCID: PMC11178593.

3. Hijazi R, **Sukkarieh H**, Bustami R, Khan J, Aldhalaan R. Enhancing Patient Safety: A Cross-Sectional Study to Assess Medical Interns' Attitude and Knowledge About Medication Safety in Saudi Arabia. *Cureus*. 2023 Dec 14;15(12):e50505. doi: 10.7759/cureus.50505. PMID: 38111820; PMCID: PMC10726002.
4. **Sukkarieh HH**, Khokhar AA, Bustami RT, Karbani GA, Alturki FA, Alvi SN. A highlight on carbamazepine-induced adverse drug reactions in Saudi Arabia: a retrospective medical records-based study. *Naunyn Schmiedebergs Arch Pharmacol*. 2023 Nov;396(11):3177-3182. doi: 10.1007/s00210-023-02525-2. Epub 2023 May 18. PMID: 37199768; PMCID: PMC10567952.
5. Henk G. Schmidt, Mai Ajaji, **Hatouf H. Sukkarieh**, et al., Failure to Demonstrate Effect of Interruptions on Diagnostic Reasoning : Three Experiments, *BMC Medical Journal*, 2022,v.1.3, 35-29
6. **Hatouf H. Sukkarieh**, Turki Alsagoor, Gulsan Karbani, et al., Awareness and Attitudes of Oncology Specialists Toward Dihydropyridine Dehydrogenase(DPD) Testing in Saudi Arabia, *Journal of Scientific Report*, submitted 2022
7. **Hatouf H. Sukkarieh**, Rami T. Bustami, Manasik N. Abdu, Ayesha A. Khokhar, Amir A. Salih, Hana K. Abdalla. The current practice of using angiotensin-converting enzyme inhibitors and angiotensin II receptor blockers in diabetic hypertensive and non-hypertensive patients Is there a room for vitamin D? *Saudi Medical Journal*, 2020, 41; 1083-1089
8. **Hatouf H Sukkarieh**, Rami T Bustami, Hadeel Al-Khaneen, Abdulkarim Saeed, The impact of body mass index and number of antihypertensive medications on clinical management of hypertension in primary health care. *Saudi Journal for Health Sciences*, 2020,9; 35-41.
9. **Sukkarieh HH**, Bustami RT, Ibrahim NO, Al-khaneen H. The Impact of Height on Clinical Management of Hypertension in Primary Care. *Int J Cardiovasc Res* 2018, 7:2. DOI: 10.4172/2324-8602.1000361.
10. Ibrahim NO, **Sukkarieh HH**, Bustami RT, Alshammari EA, Alasmari LY, Al-Kadri HM. Current umbilical cord clamping practices and attitudes of obstetricians and midwives toward delayed cord clamping in Saudi Arabia. *Ann Saudi Med*. 2017 May-Jun;37(3):216-224. doi: 10.5144/0256-4947.2017.216.
11. **Sukkarieh, HH**, Isaev D, Shirakov, R. Highly conserved As in S6 Transmembrane Segments of Calcium Channels Are Critical for their Selectivity and Gating. *Rutgers, the State University of New Jersey; Graduate School of Biomedical Sciences Annual Conference*. November 2011.
12. **Sukkarieh, HH**, Shirakov, R. The Novel Contribution of S6 in the Fourth Domain of CAV1.2 (*cardiovascular isoform of calcium channel*) Channel Selectivity. *Biophysical Society 57th Annual Meeting*, Philadelphia, Pennsylvania, February 2 - 6, 2013.
13. **Sukkarieh, HH**. Ionic Basis of Hypokalemic Periodic Paralysis Linked to Mutations in Calcium Channels. *Rutgers, the State University of New Jersey; Graduate School of Biomedical Sciences*. Technical Report, 2009.

Most Recent International Conferences and Workshops Attended

1. Genomic conference_November_2024
2. Human cancer genome research conference – May_2024
3. Certification for external reviewer from NCAAA, April 2021
4. External reviewer (AROQA) (online)
5. NCAAA five days (online)
6. NCAAA : writing KPI (NCAAA)
7. Institutional accreditation forum
8. Workshop Forum of international health organizations reviewer of quality assurance in education Academic quality practitioner
9. Program accreditation
10. NCAAA learning outcome workshop on How to fill course report and course specification
11. 3rd International Conference on Biopharmaceutics and Biologic Drugs, Aug 31-Sep 01, 2017, Philadelphia, USA.
12. Obesity Treatment and Prevention 8th Annual Meeting, Philadelphia, Pennsylvania, USA, June 22 - 24, 2016.
13. International Society for Autonomic Neuroscience (ISAN) Annual Meeting, Stresa, Italy, September 26 - 29, 2015.
14. Biophysical Society 57th Annual Meeting, Philadelphia, Pennsylvania, USA, February 2 - 6, 2013.

Honors

1. PhD degree in Physiology and Pharmacology with grade **Excellent.**
2. Master's degree in Physiology and Pharmacology with grade **Very good.**
3. Bachelor's degree in Pharmacy with grade **Very good.**

Computer Skills

- Mastery of Artificial Intelligence
- Microsoft Office: Microsoft Word, Microsoft Excel, Microsoft Power Point, Microsoft Outlook.
- Sigma Plot

Language Proficiency

Arabic: *Fluent:* speaking, reading and writing

English: *Fluent:* speaking, reading and writing

French: *Very good:* speaking, reading and writing

References: In addition to the references listed below, several other references are available upon request

- **Roman Shirokov, PhD, Associate Professor of Physiology and Pharmacology, Graduate School of Biomedical Sciences, Rutgers, the State University of New Jersey, Newark, New Jersey, USA**
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- **Natalia Shirokova, PhD, Associate Professor of Physiology and Pharmacology, Graduate School of Biomedical Sciences, Rutgers, the State University of New Jersey, Newark, New Jersey, USA**

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Fax: + 1 973 972-7950

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- **Alexandra V. Ulyanova, PhD, Research Scientist, Department of Neurosurgery, Perelman School of Medicine, University of Pennsylvania, Philadelphia, PA 19104, USA**

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