

# Mohamed Salim Chakkour

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## EDUCATION

- Wayne State University** – Detroit, MI. **Aug. 2022 to present.**
- PhD candidate in Biological Sciences and Urban Sustainability
  - GPA: 4/4
- American University of Beirut (AUB)** - Beirut, Lebanon **Sept 2015 to May 2018**
- Masters in General Biology MS.
  - GPA: 3.8/4
- Lebanese University Faculty of Sciences** - Beirut, Lebanon **Oct 2014 to June 2015**
- First year Master's degree in Animal Biology (M1)
  - Graduated in June/2015, average: Good
- Lebanese University Faculty of Sciences** - Beirut, Lebanon **Oct 2011 to June 2014**
- Bachelor degree in Biology

## WORK EXPERIENCE

- Wayne State University** **Aug 2022 to present.**
- Position Held: Graduate Research Assistant and Teaching Assistant
  - Teaching biology labs: BIO1511 & BIO4120
  - Research assistant in Greenberg's lab (Metabolism of Lipids), currently studying "Inositol Synthesis in mammalian cells."
  - Contributed to an article and wrote a review. Both are on their way to publication.
- American University of Beirut (AUB)** - Beirut, Lebanon **Sept 2018 to May 2022**
- Position Held: Research Assistant and Lab Instructor
  - **Teaching biology labs;** Biol 201 and Biol 202 (Introductory Biology courses – basic biology concepts and basic laboratory techniques)
  - Assisting Pr. Sawsan Kreydiyyeh (Professor in cell signaling and animal physiology) in biomedical research.
- Amilieh High School** - Beirut, Lebanon **Sept 2018 to June 2022**
- Position Held: Lab Manager and "Seminar and Scientific Research" course teacher.  
Biology teacher for Grades 7, 8, 9, 10, 11 (Scientific & Humanities), 12 (LS & ES).
  - Designing and preparing experiments for high school students related to biology and chemistry courses and founder and teacher of a course entitled "Seminar and Scientific Research".
- St Severius College** - Beirut, Lebanon **Feb 2018 to June 2021**
- Position Held: Biology Teacher for Grades 4, 5, 6, 9, 10, and 12 - Life Sciences & Economics.
- American University of Beirut (AUB)** - Beirut, Lebanon **Sept 2015 to 05/2018**
- Position Held: Graduate assistant and Lab Instructor
  - Assisting Pr. Sawsan Kreydiyyeh (Professor in cell signaling and animal physiology) in research.
  - **Teaching biology labs;** Biol 201 and Biol 202 (Introductory Biology courses – basic biology concepts and basic laboratory techniques)
  - Working on my thesis research entitled: "Effect of S1P through its analogue FTY720-P on hepatic Na<sup>+</sup>/K<sup>+</sup> ATPase activity" under the supervision of Pr. Kreydiyyeh.
- Academic Center private tutoring institute** - Beirut, Lebanon **Feb 2014 to June 2022**
- Sience Coordinator
  - Biology, Chemistry teacher for Grade 10 and above.

## PUBLICATIONS

1. Chakkour M, Salami A, Olleik D, Kamal I, Nouredine FY, Roz AE, Ghseini G. **Risk Markers of COVID-19, a Study from South-Lebanon. COVID. 2022;** 2(7):867-876. <https://doi.org/10.3390/covid2070063>.
2. Chakkour, M. & Nouredine, F. Y., et al. (2021). **The emergence of SARS-CoV-2 variant(s) and its impact on the prevalence of COVID-19 cases in Nabatieh region, Lebanon.** <https://doi.org/10.1101/2021.04.08.21255005>
3. Hodeify, R., Chakkour, M., Rida, R., & Kreydiyyeh, S. (2021). **PGE2 upregulates The Na<sup>+</sup>/k<sup>+</sup> Atpase In hepg2 cells Via EP4 receptors and intracellular calcium.** PLOS ONE, 16(1). doi:10.1371/journal.pone.
4. Moussawi, L. E., Chakkour, M., & Kreydiyyeh, S. (2019). **The epinephrine-induced PGE2 reduces Na<sup>+</sup>/K<sup>+</sup> ATPase activity in Caco-2 cells via PKC, NF-κB and NO.** Plos One, 14(8). doi:10.1371/journal.pone.0220987
5. Chakkour M, Kreydiyyeh S. **FTY720P Upregulates the Na<sup>+</sup>/K<sup>+</sup> ATPase in HepG2 Cells by Activating S1PR3 and Inducing PGE2 Release.** Cell Physiol Biochem. 2019;53(3):518-531. doi: 10.33594/000000155. PMID: 31502430.

6. Salami, A., Fakhri, H., Chakkour, M., Salloum, L., Bahmad, H. F., & Ghseini, G. (2019). **Prevalence, risk factors and seasonal variations of different Enteropathogens in Lebanese hospitalized children with acute gastroenteritis**. BMC Pediatrics, 19(1). doi:10.1186/s12887-019-1513-8
7. El Moussawi L, Chakkour M, Kreydiyyeh SI. **Epinephrine modulates Na<sup>+</sup>/K<sup>+</sup> ATPase activity in Caco-2 cells via Src, p38MAPK, ERK and PGE2**. PLoS One. 2018 Feb 21;13(2):e0193139. doi: 10.1371
8. Mohamed Chakkour, and Sawsan Kreydiyyeh. **FTY720-P Activates Hepatic Na<sup>+</sup>/K<sup>+</sup> ATPase via S1PR3, PKC and PGE2**. The FASEB journal. Volume 32, Issue 1\_supplement 01 Apr 2018.
9. Mohamed Chakkour and Sawsan Kreydiyyeh. **Effect of SIP through its analogue FTY720-P on hepatic Na<sup>+</sup>/K<sup>+</sup> ATPase activity**. 23<sup>rd</sup> International Scientific Conference LAAS Entitled: « *Research and Science in the Service of Humanity* ». 06<sup>th</sup> & 07<sup>th</sup> of April 2017, Lebanese University (UL)-Pierre Gemayel Campus – Fanar, Page: 83.
10. **Writer at Annahar Newspaper – Health Section:** collaborate with journalists in writing articles and filming short videos to explain scientific articles and biomedical breakthrough technologies.

### AWARDS AND HONORS

First Place - Annual Fund It Forward Student Video Challenge - Graduate Level (December 2023)

- Awarded first place in a competition highlighting the importance of my research and advocating its funding by Congress.
- The competition is organized by The Science Coalition, a nonprofit, nonpartisan organization.
- Created a compelling video titled "Inositol and Bipolar Disorder" emphasizing the significance of the research and its potential impact.

### CONFERENCES

- Mohamed Chakkour and Sawsan Kreydiyyeh. **Effect of SIP through its analogue FTY720-P on hepatic Na<sup>+</sup>/K<sup>+</sup> ATPase activity**. 23<sup>rd</sup> International Scientific Conference LAAS Entitled: « *Research and Science in the Service of Humanity* ». 06<sup>th</sup> & 07<sup>th</sup> of April 2017, Lebanese University (UL)-Pierre Gemayel Campus – Fanar, Page: 83. (Poster presentation).
- Mohamed Chakkour, and Sawsan Kreydiyyeh. **FTY720-P Activates Hepatic Na<sup>+</sup>/K<sup>+</sup> ATPase via S1PR3, PKC and PGE2**. The FASEB journal. Volume 32, Issue 1\_supplement 01 Apr 2018. Submitted an abstract to **Experimental Biology 2018** international conference held in San Diego Convention Center April 21-25, 2018.
- Oral presentation at "**The 1st Biomedical Sciences Seminars**" under the theme "**Advances in Oncology**", at the Lebanese University - Faculty of Pharmacy from the 19<sup>th</sup> of April till the 7<sup>th</sup> of June 2018.

### ACCOMPLISHED PROJECTS

- **Title: Effect of SIP through its analogue FTY720-P on hepatic Na<sup>+</sup>/K<sup>+</sup> ATPase activity. (Thesis)**
- **Title: Effect of Epinephrine on colon Na<sup>+</sup>/K<sup>+</sup> ATPase activity.**
- **Title: Haplotypes' and SNPs' roles in the genetics of population (Genetics of Population course)**

**Supervisor:** Prof. Fahed Nasser (Professor in "Molecular Genetics and Functional Genetics" - Department of Biology - Faculty of Science-I - Lebanese University)

### VOLUNTEERING

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|--|----------------------------|
| <b>Member of Kafarmelki's Municipality committee to apply measures to combat COVID 19</b>  | <b>Feb 2020- May 2021</b>  |
| <ul style="list-style-type: none"> <li>• Cooperate with the village officials to take measures concerning the spread of COVID-19</li> <li>• Help the village officials apply conditional regulations to prevent the spread of the disease.</li> </ul>  |                            |
| <b>Chief of Amilieh Scout Association - Beirut, Lebanon</b>  | <b>2005 – 2022</b>         |
| <ul style="list-style-type: none"> <li>• Performed different activities (Educational, Entertaining, Environmental, and National) for children and teenagers.</li> <li>• Attended 8 workshops with Lebanese Scout Federation and 12 workshops with Amilieh Scout Association that enhanced my time-management, problem-solving, and team-coordination skills</li> </ul> |                            |
| <b>Awareness project with the Lebanese Association for NGOs Development (LAND) in cooperation with Mercy Corps.</b>  | <b>Jan – Aug / 2016</b>    |
| <ul style="list-style-type: none"> <li>• Participated as a member with LAND in a project to raise awareness against Gender Based Violence</li> </ul>   |                            |
| <b>UNICEF Awareness event in cooperation with Balamand University - Beirut, Lebanon</b>  | <b>Sep 2015 – Feb 2017</b> |
| <ul style="list-style-type: none"> <li>• Participated in an awareness event entitled "Awareness of the dangers of mines and cluster bombs"</li> </ul>  |                            |

### SUMMARY SKILLS

#### **COMPUTER SKILLS:**

- R-Studio for statistical analysis, Graph-pad, Image Lab, use of different Biology Databases (Pub Med, NCBI, PharmGKB ...).
- Word, Excel, and PowerPoint.
- Adobe Photoshop and illustrator.

**LANGUAGES:**

- Fluent in English and Arabic (Reading, Writing, Speaking, and Typing).

**SOFT SKILLS:**

- Leadership, communication, team-management, time management, problem solving, accurate hard-worker, scientific article analysis, writing scientific mini-reviews, grant proposals, and scientific articles.

**ACTIVITIES**

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**Scouts:** Amilieh Scout Association in Lebanon and Scout Federation Lebanon.

**Hobbies:** Swimming, Walking, Reading Scientific Articles and Travelling.

**REFERENCES**

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Available upon request