

Mohammad-Reza Ghovanloo, PhD

email: reza.ghovanloo@yale.edu

EDUCATION & TRAINING

2021-Current	Postdoctoral, Department of Neurology, Yale University School of Medicine, USA.
2015-2020	PhD, Department of Biomedical Physiology & Kinesiology, Simon Fraser University, Canada.
2009-2015	BSc (Hons), Department of Molecular Biology & Biochemistry, Simon Fraser University, Canada.

EXPERIENCE

2021-Current	<i>Postdoctoral Researcher</i> , Department of Neurology, Yale University School of Medicine, New Haven, USA. <i>Research Scientist</i> , Department of Veterans Affairs, VA Connecticut Health Care, West Haven, USA.
2020-2020	<i>Visiting Researcher</i> , Science for Life Laboratory, Department of Physics, KTH Royal Institute of Technology, Stockholm, Sweden.
2017-2019	<i>Research Fellow</i> , Cellular & Molecular Biology, Xenon Pharmaceuticals, Canada.
2013-2015	<i>Research Assistant</i> , Biomedical Physiology & Kinesiology, Simon Fraser University, Canada.
2012-2013	<i>Research Assistant</i> , Biological Sciences, Simon Fraser University, Canada.

AWARDS & HONOURS

2021	<i>Graduand Speaker at Convocation Ceremony</i> , Simon Fraser University, Canada. (\$0)
2020	<i>Research Grant Stipend</i> , Simon Fraser University, Canada. (\$450)
2019	<i>Travel and Minor Research Award</i> , Simon Fraser University, Canada. (\$1,050)
2019	<i>Top 8 National Ranking</i> , Annual National Student Paper Competition, Institute of Public Administration of Canada (IPAC), Canada. (\$0)
2019	<i>Featured Article on the Magazine Cover (February 2019, Volume 12, Issue 2), (June 2019, Volume 12, Issue 6), & (January 2020, Volume 13, Issue 1)</i> , The Canadian Business Journal, Canada. (\$0)
2019	<i>Celebration of Authors</i> , Simon Fraser University, Canada. (\$0)
2019	<i>Graduate Student Society Open Access Award</i> , Simon Fraser University, Canada. (\$130)
2018	<i>Second Most Read Article in Journal for the Month of September</i> , Journal of Biological Chemistry, USA. (\$0)
2018	<i>Travel and Minor Research Award</i> , Simon Fraser University, Canada. (\$1,000)
2017	<i>Celebration of Authors</i> , Simon Fraser University, Canada. (\$0)

2017	<i>Travel and Minor Research Award</i> , Simon Fraser University, Canada. (\$1,500)
2016	<i>Travel and Minor Research Award</i> , Simon Fraser University, Canada. (\$1,093)
2015	<i>Dean's Honour Roll</i> , Simon Fraser University, Canada. (\$0)
2015	<i>President's Honour Roll</i> , Simon Fraser University, Canada. (\$0)

FELLOWSHIPS & SCHOLARSHIPS

2022-2024	<i>Banting Postdoctoral Fellowship</i> , Canadian Institutes of Health Research (CIHR), Canada. (\$140,000)
2022-2024	<i>Postdoctoral Fellowship (PDF)</i> , Natural Sciences and Engineering Research Council of Canada (NSERC), Canada. (\$90,000) (Declined Offer)
2020-2020	<i>Graduate Fellowship</i> , Simon Fraser University, Canada. (\$7,000)
2019-2020	<i>Canada Graduate Scholarship-Michael Smith Foreign Study Supplement-Doctoral (CGS-MSFSS)</i> , Natural Sciences and Engineering Research Council of Canada (NSERC), Canada. (\$6,000)
2019-2021	<i>Alexander Graham Bell Canada Graduate Scholarship-Doctoral (CGS-D)</i> , Natural Sciences and Engineering Research Council of Canada (NSERC), Canada. (\$70,000)
2018-2020	<i>PhD Graduate Accelerate Fellowship</i> , Mitacs, Canada. (\$90,000)
2017-2018	<i>MSc Graduate Accelerate Fellowship</i> , Mitacs, Canada. (\$30,000)

PEER-REVIEWED PUBLICATIONS (RESEARCH & REVIEW)

(* Indicates co-first author.)

1. Roston, T. M., Fouda, M. A., Ghovanloo, M.-R., Plumereau, Q., Atallah, J., Davies, B., Peltenburg, P. J., Pouliot, V., Holl, M., Jespersen, C. B., Steinberg, C., Knight, L., Escudero, C. A., Christian, S., MacIntyre, C., Fischbach, P., Tfelt-Hansen, J., Sanatani, S., Roberts, J. D., Yap, S.-C., Wilde, A. A., Chahine, M., Ruben, P. C., & Krahn, A. D. (2023). *In Prepration*.
2. Ghovanloo, M.-R., Tyagi, S., Zhao, P., Kiziltug, E., Estacion, M., Dib-Hajj, S. D., & Waxman, S. G. (2023). *In Prepration*.
3. Goodchild, S. J., Shuart, N. G., Williams, A.D., Wenlei, Y., Parrish, R. R., Soriano, M., Thouta, S., Mezeyova, J., Waldbrook, M., Dean, R. A., Focken, T., Ghovanloo, M.-R., Ruben, P. C., Scott, F., Cohen, C. J., Empfield, J. R., Johnson, J. P. (2023). *Submitted*.
4. Tyagi, S., Higerd-Rusli, G. P., Ghovanloo, M.-R., Dib-Hajj, F., Zhao, P., Liu, S., Kim, D. H., Shim, J. S., Park, K. S., Waxman, S. G., Choi, J. S., Dib-Hajj, S. D. (2023). *Submitted*.
5. Ghovanloo, M.-R., Effraim, P. R., Tyagi, S., Zhao, P., Dib-Hajj, S. D., & Waxman, S. G. (2023). *Submitted*.
6. Ghovanloo, M.-R., Arnold, J. C., & Ruben, P. C. (2023). [Editorial: Cannabinoid interactions with ion channels, receptors, and the bio-membrane](#). *Frontiers in Physiology*.
7. Ghovanloo, M.-R., Effraim, P. R., Yuan, J. H., Schulman, B. R., Jacobs, D. S., Dib-Hajj, S. D., & Waxman, S. G. (2023). [Nav1.7 P610T mutation in two siblings with persistent ocular pain after corneal axon transection: impaired slow-inactivation and hyperexcitable trigeminal neurons](#). *Journal of*

Neurophysiology.

8. Ghovanloo, M.-R., Tyagi, S., Zhao, P., Kiziltug, E., Estacion, M., Dib-Hajj, S. D., & Waxman, S. G. (2023). [High-throughput combined voltage-clamp/current-clamp analysis of freshly isolated neurons](#). *Cell Reports Methods*.
9. Ghovanloo, M.-R., Dib-Hajj, S. D., Goodchild, S. J., Ruben, P. C., & Waxman, S. G. (2022). [Non-psychoactive phytocannabinoid interactions with voltage-gated sodium channels: an update on cannabidiol and cannabigerol](#). *Frontiers in Physiology*.
10. Ghovanloo, M.-R., Goodchild, S. J., & Ruben, P. C. (2022). [Cannabidiol increases gramicidin current in human embryonic kidney cells: An observational study](#). *PLoS One*.
11. Fouda, M. A. *, Ghovanloo, M.-R. *, & Ruben, P. C. (2022). [Late sodium current: incomplete inactivation triggers seizures, myotonias, arrhythmias, and pain syndromes](#). *Journal of Physiology*.
12. Ghovanloo, M.-R., Estacion, M., Higerd-Rusli, G. P., Zhao, P., Dib-Hajj, S., & Waxman, S. G. (2022). [Inhibition of sodium conductance by cannabigerol contributes to a reduction of neuronal dorsal root ganglion excitability](#). *British Journal of Pharmacology*.
13. Ghovanloo, M.-R. & Ruben, P. C. (2021). [Cannabidiol and sodium channel pharmacology: general overview, mechanism, and clinical implications](#). *The Neuroscientist*.
14. Ghovanloo, M.-R., Choudhury, K., Bandaru, T. S., Fouda, M. A., Rayani, K., Rusinova, R., Phaterpekar, T., Nelkenbrecher, K., Watkins, A. R., Poburko, D., Thewalt, J., Andersen, O. S., Delemotte, L., Goodchild, S. J., & Ruben, P. C. (2021). [Cannabidiol inhibits the skeletal muscle Nav1.4 by blocking its pore and by altering membrane elasticity](#). *Journal of General Physiology*.
15. Ghovanloo, M.-R.*, Atallah, J.*, Escudero, C. A., & Ruben, P. C. (2020). [Biophysical Characterization of A Novel SCN5A Mutation Associated with an Atypical Phenotype of Atrial and Ventricular Arrhythmias and Sudden Death](#). *Frontiers in Physiology*.
16. Sait, L. G.*, Sula, A.*, Ghovanloo, M.-R.*, Hollingworth, D., Ruben, P. C., & Wallace, B. A. (2020). [Cannabidiol interactions with voltage-gated sodium channels](#). *eLife*.
17. Ghovanloo, M.-R. & Ruben, P. C. (2020). [Say cheese: structure of the cardiac electrical engine is captured](#). *Trends in Biochemical Sciences*.
18. Fouda, M. A., Ghovanloo, M.-R., & Ruben, P. C. (2020). [Cannabidiol protects against high glucose-induced oxidative stress and cytotoxicity in cardiac voltage-gated sodium channels](#). *British Journal of Pharmacology*.
19. Ghovanloo, M.-R., Peters, C. H., & Ruben, P. C. (2018). [Effects of Acidosis on Neuronal Voltage-Gated Sodium Channels: Nav1.1 and Nav1.3](#). *Channels (Austin)*.
20. Ghovanloo, M.-R., Shuart, N. G., Mezeyova, J., Dean, R. A., Ruben, P. C., & Goodchild, S. J. (2018). [Inhibitory effects of cannabidiol on voltage-dependent sodium currents](#). *Journal of Biological Chemistry*.
21. Ghovanloo, M.-R., Abdelsayed, M., Peters, C. H., & Ruben, P. C. (2018). [A Mixed Periodic Paralysis & Myotonia Mutant, P1158S, Imparts pH-Sensitivity in Skeletal Muscle Voltage-gated Sodium Channels](#). *Scientific Reports*.
22. Peters, C. H., Ghovanloo, M.-R., Gershon, C., & Ruben, P. C. (2018). [pH Modulation of Voltage-Gated Sodium Channels](#). *Handbook of Experimental Pharmacology*.
23. Ghovanloo, M.-R., Aimar, K., Ghadiry-Tavi, R., Yu, A., & Ruben, P. C. (2016). [Physiology and](#)

Pathophysiology of Sodium Channel Inactivation. *Current Topics in Membranes*.

24. Ghovanloo, M.-R., Abdelsayed, M., & Ruben, P. C. (2016). Effects of amiodarone and N-desethylamiodarone on cardiac voltage-gated sodium channels. *Frontiers in Pharmacology*.

RESEARCH ABSTRACTS (CONFERENCES)

1. Mohammad-Reza Ghovanloo, Philip R. Effraim, Sidharth Tyagi, Peng Zhao, Sulayman Dib-Hajj, and Stephen G. Waxman. **2023**. Cannabinol selectively functionally inhibits threshold sodium currents and reduces excitability in neurons of the dorsal root ganglion. *Society for Neuroscience*, Washington DC, USA. International Conference. [Poster presentation]
2. Mohammad-Reza Ghovanloo, Sidharth Tyagi, Peng Zhao, Emre Kiziltug, Mark Estacion, Sulayman Dib-Hajj, and Stephen G. Waxman. **2023**. A novel high throughput combined voltage-clamp/current-clamp analysis of single primary neurons. *Biophysical Society*, San Diego, California, USA. International Conference. [Poster presentation]
3. Mohammad-Reza Ghovanloo, Mark Estacion, Peng Zhao, Sulayman Dib-Hajj, and Stephen G. Waxman. **2022**. Cannabigerol inhibits sodium conductance to reduce neuronal dorsal root ganglion excitability. *Biophysical Society*, San Francisco, California, USA. International Conference. [Poster presentation]
4. Thomas M. Roston*, Mohamed A. Fouda, Mohammad-Reza Ghovanloo, Joseph Atallah, Quentin Plumereau, Puck Peltenburg, Brianna Davies, Valérie Pouliot, Marijn Holl, Camilla B. Jespersen, Christian Steinberg, Linda M. Knight, Carolina A. Escudero, Susan Christian, Ciorsti MacIntyre, Peter S. Fischbach, Jacob Tfelt, Sing-Chien Yap, Shubhayan Sanatani, Jason D. Roberts, Arthur A. M. Wilde, Mohamed Chahine, Peter C. Ruben, Andrew D. Krahn. **2021**. Clinical and functional characterization of SCN5A variants linked to adrenergic ventricular arrhythmia: a multicenter study. *Heart Rhythm Conference*, Boston, Massachusetts, USA. International Conference. *Heart Rhythm*, 18(8), S380. <https://doi.org/10.1016/j.hrthm.2021.06.942> [Poster presentation]
5. Mohammad-Reza Ghovanloo, Tagore Sanketh Bandaru, Koushik Choudhury, Mohamed A. Fouda, Kaveh Rayani, Damon Poburko, Lucie Delemotte, and Peter C. Ruben. **2020**. Mechanism of sodium channel inhibition by cannabidiol. *Biophysical Society*, San Diego, California, USA. International Conference. *Biophysical Journal*, 118(3), 499a. <https://doi.org/10.1016/j.bpj.2019.11.2757> [Platform presentation]
6. Samuel J. Goodchild*, Mohammad-Reza Ghovanloo, Aaron Williams, Noah Shuart, Maegan Soriano, Janette Mezeyova, Richard Dean, Thilo Focken, Peter C. Ruben, James Empfield, Charles J. Cohen, and J. P. Johnson. **2020**. Biophysical Society, San Diego, California, USA. International Conference. Targeting of NaV1.6 and NaV1.2 to Inhibit Excitatory vs Inhibitory Neural Circuits. *Biophysical Journal*, 118(3), 499a-500a. <https://doi.org/10.1016/j.bpj.2019.11.2758> [Platform presentation]
7. Mohamed A. Fouda*, Mohammad-Reza Ghovanloo, and Peter C. Ruben. **2020**. Biophysical Society, San Diego, California, USA. International Conference. Protective Effect of Cannabidiol Against Oxidative Stress and Cytotoxicity Evoked by High Glucose in Cardiac Voltage-Gated Sodium Channels. *Biophysical Journal*, 118(3), 578a. <https://doi.org/10.1016/j.bpj.2019.11.3138> [Poster presentation]
8. Mohammad-Reza Ghovanloo, Joseph Atallah, Carolina A. Escudero, and Peter C. Ruben. **2019**. Biophysical characterization of a novel CPVT-causing SCN5A mutation: T1857I. *Gordon Research Conference (Cardiac*

- Arrhythmia Mechanisms*), Renaissance Tuscany II Ciocco in Lucca, Italy. International Conference. [Poster presentation]
9. Mohammad-Reza Ghovanloo, Joseph Atallah, Carolina A. Escudero, and Peter C. Ruben. **2019**. Biophysical characterization of a novel CPVT-causing *SCN5A* mutation: T1857I. *Gordon Research Seminar (Cardiac Arrhythmia Mechanisms)*, Renaissance Tuscany II Ciocco in Lucca, Italy. International Conference. [Poster presentation]
 10. Mohammad-Reza Ghovanloo, Noah G. Shuart, Jannette Mezeyova, Peter C. Ruben, and Samuel J. Goodchild. **2018**. Modulation of Voltage-gated sodium Channels by Cannabidiol. *Gordon Research Conference (Ion Channels)*, South Hadley, Massachusetts, USA. International Conference. [Poster presentation]
 11. Mohammad-Reza Ghovanloo, Noah G. Shuart, Jannette Mezeyova, Peter C. Ruben, and Samuel J. Goodchild. **2018**. Modulation of Voltage-gated sodium Channels by Cannabidiol. *Gordon Research Seminar (Ion Channels)*, South Hadley, Massachusetts, USA. International Conference. [Poster presentation]
 12. Mohammad-Reza Ghovanloo, Noah G. Shuart, Jannette Mezeyova, Peter C. Ruben, and Samuel J. Goodchild. **2018**. Effects of Cannabidiol on Human Nav Channels. *Biophysical Society*, San Francisco, California, USA. International Conference. *Biophysical Journal*, 114(3), 636a. <https://doi.org/10.1016/j.bpj.2017.11.3437> [Poster presentation]
 13. Mohammad-Reza Ghovanloo and Peter C. Ruben. **2017**. Mixed Periodic Paralysis & Myotonia Mutant, P1158S, Imparts pH Sensitivity in Nav1.4. *Biophysical Society*, New Orleans, Louisiana, USA. International Conference. *Biophysical Journal*, 112(3), 241a. <https://doi.org/10.1016/j.bpj.2016.11.1319> [Poster presentation]
 14. Mohammad-Reza Ghovanloo. **2017**. Mixed Periodic Paralysis & Myotonia Mutant, Imparts pH Sensitivity in Skeletal Voltage-gated Sodium Channels. Biomedical Physiology and Kinesiology Research, Burnaby, Canada. Three-minute thesis. Institutional Meeting. [Podium presentation]
 15. Mohammad-Reza Ghovanloo and Peter C. Ruben. **2017**. Mixed Periodic Paralysis & Myotonia Mutant, P1158S, Imparts pH Sensitivity in Nav1.4. *Biomedical Physiology and Kinesiology Research*, Burnaby, Canada. Institutional Meeting. [Poster presentation]
 16. Mohammad-Reza Ghovanloo, Kaveh Rayani, and Glen F. Tibbits. **2017**. Thermodynamic properties of dilated cardiomyopathy (DCM) associated troponin C mutant Q50R analyzed through isothermal titration calorimetry (ITC). *Gordon Research Conference (Cardiac Arrhythmia Mechanisms)*, Ventura, California, USA. International Conference. [Poster presentation]
 17. Mohammad-Reza Ghovanloo, Kaveh Rayani, and Glen F. Tibbits. **2017**. Thermodynamic properties of dilated cardiomyopathy (DCM) associated troponin C mutant Q50R analyzed through isothermal titration calorimetry (ITC). *Gordon Research Seminar (Cardiac Arrhythmia Mechanisms)*, Ventura, California, USA. International Conference. [Poster presentation]
 18. Mohammad-Reza Ghovanloo, Mena Abdelsayed, and Peter C. Ruben. **2016**. The Effects of Amiodarone and N-Desethylamiodarone on Cardiac Voltage-Gated Sodium Channels. *Biophysical Society*, Los Angeles, California, USA. International Conference. *Biophysical Journal*, 110(3), 113a. <https://doi.org/10.1016/j.bpj.2015.11.663> [Poster presentation]

19. Mohammad-Reza Ghovanloo, Mena Abdelsayed, and Peter C. Ruben. **2016**. The Effects of Amiodarone and N-Desethylamiodarone on Cardiac Voltage-Gated Sodium Channels. *Biomedical Physiology and Kinesiology Research*, Burnaby, Canada. Institutional Meeting. [Poster presentation]

ORAL PRESENTATIONS & INVITED TALKS

1. Cannabinol functionally-selectively inhibits threshold sodium currents and reduces excitability in neurons of the dorsal root ganglion. *Sophion User Meeting, Harvard Medical School*. Boston, Massachusetts, USA. International Meeting. **(2023)**
2. Defining populations of freshly isolated neurons using a high-throughput and unbiased approach. *Northeastern Pain Symposium – Zuckerman Institute, Columbia University*. New York, New York, USA. **(2023)**
3. High-throughput combined voltage-clamp/current-clamp analysis of freshly isolated neurons. *Sophion Webinar*. Virtual Meeting. **(2023)**
4. Cannabidiol increases gramicidin current in human embryonic kidney cells: An observation study. *CSEQUENCE Journal Club*. Virtual Meeting. **(2022)**
5. Inhibition of sodium conductance by cannabigerol contributes to a reduction of neuronal dorsal root ganglion excitability. *Biophysical Society Satellite Meeting - Drug Discovery for Ion Channels*, San Francisco, California, USA. International Conference. **(2022)**
6. Inhibition of sodium conductance by cannabigerol contributes to a reduction of neuronal dorsal root ganglion excitability. *Sophion User Meeting*, Boston, Massachusetts, USA. International Conference. **(2021)**
7. Delineating the interactions between cannabidiol and sodium channels. *Biophysical Society Satellite Meeting - A World of Opportunity: Ion Channels and Automated Patch-Clamping*. Massachusetts, USA (Virtual Meeting). International Conference. **(2020)**
8. Interactions Between Cannabidiol and Sodium Channels. *Online Meeting on Cannabis and Cannabinoids*. Melbourne, Victoria, Australia (Virtual Meeting). International Conference. **(2020)**
9. Mechanism of sodium channel inhibition by cannabidiol. *Biophysical Society Meeting (Platform: Voltage-gated Na and Ca Channels)*. San Diego, California, USA. International Conference. **(2020)**
10. Cannabidiol inhibits voltage-dependent sodium currents. *Department of Chemistry and Chemical Biology, Harvard University*, Boston, Massachusetts, USA. Institutional Meeting. **(2019)**
11. Inhibitory effects of cannabidiol on voltage-dependent sodium currents. *School of Medicine, Yale University*, New Haven, Connecticut, USA. Institutional Meeting. **(2019)**
12. Inhibitory effects of cannabidiol on voltage-dependent sodium currents. *Sophion User Meeting*, Boston, Massachusetts, USA. International Conference. **(2019)**
13. Biophysical characterization of a novel CPVT-causing *SCN5A* mutation: T1857I. *Gordon Research Seminar (Cardiac Arrhythmia Mechanisms)*, Renaissance Tuscany II Ciocco in Lucca, Italy. International Conference. **(2019)**
14. *SCN4A* Mutation Causing Periodic Paralysis & Myotonia: Exercise as a Trigger, & Cannabidiol as a Treatment. *Griffith University: International Student Research Forum*. Gold Coast, Queensland, Australia. International Conference. **(2018)**

15. Mixed Periodic Paralysis & Myotonia Mutant Imparts pH Sensitivity in Skeletal Voltage-gated Sodium Channels. *Centre for Cell Biology, Development, and Disease*, Vancouver, Canada. Institutional Meeting. (2017)

PATENTS

1. Inventors: Mohammad-Reza Ghovanloo, Mohamed A. Fouda, Vishal A. Jadhav, Dana A. Page, Koushik Choudhury, Radda Rusinova, Tejas Phaterpekar, Mani Patel, and Peter C. Ruben. [*Composition and Therapeutic Uses of Cannabidiol*](#). (Patent No. US-20230123654-A1)
- Application filed under: Mani Patel and Shreema Merchant (Akseera Pharma, Inc.)

SCHOLARLY SERVICE

2023-Current	Canadian Institutes of Health Research (Reviewer)
2022-Current	Life Sciences (Reviewer)
2022-Current	Cannabis and Cannabinoid Research (Reviewer)
2022-Current	Frontiers in Cellular Neuroscience (Reviewer)
2022-Current	Frontiers in Pain Research (Guest Associate Editor)
2022-Current	Frontiers in Physiology (Guest Associate Editor)
2022-Current	Cell Reports (Reviewer)
2021-Current	Frontiers in Neurology (Reviewer)
2021-Current	Neuropharmacology (Reviewer)
2021-Current	Journal of Pain Research (Reviewer)
2021-Current	European Journal of Pharmacology (Reviewer)
2021-Current	Journal of General Physiology (Reviewer)
2021-Current	Frontiers in Physiology (Review Editor, Editorial Board)

LAUNCHED SPECIAL ISSUE RESEARCH COLLECTIONS

Summer 2022	Research Topic: Sodium Channels, Neuronal Excitability, and Pain . Journal (Subsection): Frontiers in Pain Research (Neuropathic Pain). Editors: Matthew Alsaloum, <u>Mohammad-Reza Ghovanloo</u> , Christina Van.
Spring 2022	Research Topic: Cannabinoid Interactions with Ion Channels, Receptors, and the Bio-Membrane . Journal (Subsection): Frontiers in Physiology (Membrane Physiology and Membrane Biophysics). Editors: <u>Mohammad-Reza Ghovanloo</u> , Peter C. Ruben, Jonathan C. Arnold.

PROFESSIONAL MEMBERSHIP

2023-Current	Society for Neuroscience (Member)
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2016-Current Biophysical Society (Member)

PUBLICATIONS (NEWSPAPERS & MAGAZINES)

1. Mohammad-Reza Ghovanloo. Title 1: Sweden opts for trusting citizens rather than forcing COVID-19 lockdown measures. Title 2: What I learned from the COVID-19 response in Sweden. Title 3: Why Canada and Sweden took different approaches to fighting COVID-19. (Op-Ed). April **2020**. Print and re-prints: [The Toronto Star](#), [Ottawa Life Magazine](#), [The Good Men Project](#), [The Hamilton Spectator](#), [Cambridge Times](#), & [The Hill Times](#).
2. Mohammad-Reza Ghovanloo. Title 1: Too many bureaucratic hurdles for cannabis research. Title 2: Rules need to be loosened to allow researchers quicker access to cannabis. Title 3: Barriers to cannabis research need to get removed. Title 4: Researchers are studying cannabis for promising anti-seizure medication. (Op-Ed). October & November **2018**. February, June, & November **2019**. Print and re-prints: [National Post](#), [University Affairs](#), [Ottawa Life Magazine](#), [Toronto Sun](#), [Edmonton Journal](#), [Ottawa Sun](#), [Edmonton Sun](#), [Ottawa Citizen](#), [Calgary Herald](#), [Windsor Star](#), [Montreal Gazette](#), [The London Free Press](#), [The Province](#), [Regina Leader-Post](#), [Troy Media](#), [Calgary's Business](#), [The Hamilton Spectator](#), [Niagara Falls Review](#), [The Record](#), [The Peterborough Examiner](#), [Winnipeg Sun](#), [St. Catharines Standard](#), [Red Deer Advocate](#), [Vancouver Sun](#), [The StarPhoenix](#), [Financial Post](#), [Owen Sound Sun Times](#), [The GrowthOp](#), [West-Central Crossroads](#), [Winnipeg Free Press](#), [Affaires Universitaires](#), [Welland Tribune](#), [Canadian Business Journal](#), & [The Good Men Project](#).
 - Mohammad-Reza Ghovanloo: Rules need to be loosened to allow researchers quicker access to cannabis (Featured Op-Ed). November **2018**. Print: [The Province](#).
3. Mohammad-Reza Ghovanloo. Canada can show the world what strength in diversity really means (Editorial Blog). February **2017**. Print: [Huffington Post](#).

NEWS COVERAGE OF SCHOLARLY WORK

1. SFU research finds clues to understanding CBD and its medicinal effects. November **2020**. Print: [SFU News](#).
2. PhD graduate's research helps answer why so many CBD health claims 'Wonder Drug or Snake Oil?'. November **2020**. Print: [SFU News](#).
3. How cannabidiol may be helpful in treating diabetes-related arrhythmias. June **2020**. Print: [SFU News](#).
4. Medical research breakthroughs at SFU. November **2018**. Print: [The Peak](#).
5. Patrick Johnston: How marijuana legalization will — and won't — affect the NHL. October **2018**. Print: [National Post](#).

TEACHING

Fall 2021 **Expert Contributor, INP 701 – Principles of Neuroscience. School of Medicine, Yale University, USA.** As a postdoc, I was invited as an expert to contribute to teaching activities to graduate students and to provide insight into ion channel biophysics.

- Fall 2018 ***Tutor Marker, BPK 304W – Inquiry and Measurement. Biomedical Physiology & Kinesiology, Simon Fraser University, Canada.*** I was responsible for marking exams and assignments. I also held office hours to assist students with questions and problems regarding exams and assignments.
- Fall 2015 ***Teaching Assistant, MBB 322 – Molecular Physiology. Molecular Biology & Biochemistry, Simon Fraser University, Canada.*** I was responsible for setting up and running weekly tutorials where I went over lecture material, helped students with assignments and answered questions. I also created my own sets of questions based on course contents for every tutorial session to help students better understand key concepts. I was also responsible for grading assignments and exams.

GENERAL SERVICE

- 2016-2021 ***Volunteer, Surgical Services and Care Unit, Lions Gate Hospital, North Vancouver, Canada.*** During my volunteering shifts at the hospital, I oversaw discharging patients that have undergone surgery. I also updated families on the status of patients, and whether they could visit them.
- 2018-2018 ***Graduate Student Society Graduate Representative, Hiring Committee for Executive Director of Student Affairs, Simon Fraser University, Canada.*** I was selected by the Graduate Student Society to serve as a member on a committee (this committee was composed of several high ranking university officials, such as vice-presidents and deans) in charge of hiring the new Executive Director of university student affairs, with a job description that included: senior management of the team of student services, setting the strategic direction of overall serves, lead the direction of institutional development and delivery of student services for all university campuses. The job responsibilities also included executive management of: Campus Community Engagement, Academic Advising and Student Success, University Recruitment (domestic and international), Centre for Students with Disabilities, First Nations Student Centre, Health and Counselling Centre, Interfaith Centre, Residence and Housing, Student Development, and Student Central.
- 2016-2017 ***Biomedical Physiology and Kinesiology Graduate Representative, Teaching Student Staff Union, Simon Fraser University, Canada.*** I was voted in by my peers and subsequently served as the graduate departmental representative at the union. As a representative, I participated in regular union meetings, voted on particular matters, and informed the graduate society of vital decisions that were made.
- 2015-2016 ***Canadian Member of Parliament's Personal Photographer During Community Events, MP John Weston, West Vancouver, Canada.*** As a volunteer photographer, I was responsible for taking photos from the MP and crowds during special community events, including Canada Day and the Chinese New Year celebrations.
- 2010-2010 ***Volunteer, Evergreen House, North Vancouver, Canada.*** During my volunteer tenure at the Evergreen House Senior Center, I was in charge of taking the senior residents on wheelchair strolls and helping physiotherapists and nurses with everyday tasks.

PROFESSIONAL DEVELOPMENT & CERTIFICATION

2022	<i>Diversity, Equity, and Inclusion Training</i> , Yale School of Medicine. (1 day)
2019	<i>Radiation Safety Awareness Training</i> , Xenon Pharmaceuticals. (1 day)
2017	<i>Canadian Center for Occupational Health and Safety – WHMIS 2015 for workers</i> , Xenon Pharmaceuticals. (2 days)
2014	<i>Laboratory Safety Training – General Laboratory Safety, Biosafety, Chemical Safety, Spill Response</i> , Simon Fraser University. (3 days)

OTHER EXPERIENCES

Co-peer-reviewed publications with Peter C. Ruben in:

1. *Physiological Reviews*
2. *Neuroscience Letters*
3. *Channels*
4. *Scientific Reports*
5. *Journal of Neurophysiology*

Co-wrote the following grants with Peter C. Ruben

2018	Cannabinoids and pain-associated voltage-gated sodium channels, CIHR Catalyst cannabis grant, Canada. (Submitted: November 10, 2018)
2017	Rare Disease Foundation and the BC Children's Hospital Foundation, Canada. (\$3,500)

Mentorship

I have been actively mentoring and teaching the fundamentals of working in the lab to undergraduate students (and others) that have entered the lab in various capacities.

I was sporadically involved in running science workshops with the Science in Action program for elementary and high school students on the university campus.

Athletics

Many years	Recreational: <i>Bodybuilding, Mixed-Martial Arts, High Intensity Interval Training</i> , North Shore, Canada.
2008-2009	<i>AA Rugby</i> , West Vancouver, Canada.