

Clarissa S. Sit – Curriculum Vitae

Department of Chemistry
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Citizenship: Canadian

Education

- **Doctor of Philosophy in Chemistry** – 2006/09 ~ 2011/08
Awarded Faculty of Science Doctoral Dissertation Award
Department of Chemistry, University of Alberta, Edmonton, Canada
Supervisor: Professor John C. Vederas
- **Bachelor of Science with Honours in Pharmacology** – 2002/09 ~ 2006/04
With First Class Honours, Awarded Dean's Silver Medal in Science
University of Alberta, Edmonton, Canada

Academic Employment History

- **Assistant Professor** – 2016/07 ~ present
Department of Chemistry
Saint Mary's University, Halifax, NS, Canada

Previous Research Experience

- **Post doctoral fellow** – 2011/10 ~ 2016/06
With Prof. Jon Clardy, Dept. of Biological Chemistry and Molecular Pharmacology, Harvard Medical School, Boston, USA
 - Investigating the biochemistry of signalling systems between symbiotic organisms
- **Ph.D. graduate researcher** – 2006/09 ~ 2011/08
With Prof. John C. Vederas, Dept. of Chemistry, University of Alberta
 - Elucidated the three-dimensional structures of antimicrobial peptides
- **Visiting researcher** – 2007/09 ~ 2007/11
With Prof. Colin Hill & Prof. R. Paul Ross, University College Cork and Moorepark Centre, Ireland
 - Isolated haemolytic factors and characterized antimicrobial peptides for a research collaboration

Undergraduate Research	Dates
Honours' Project (With Prof. Peter E. Light, Pharmacology, University of Alberta) <ul style="list-style-type: none">• Evaluated glucose sensitivity of β-cells over-expressing fatty acyl-CoA synthetase	2005-2006
Summer student (With Prof. John C. Vederas, Chemistry, University of Alberta) <ul style="list-style-type: none">• Investigated methods of modifying antimicrobial peptides to improve potency	2005, 2006
Summer student (With Prof. Bernard D. Lemire, Biochemistry, University of Alberta) <ul style="list-style-type: none">• Studied role of cytochrome b_{562} in <i>S. cerevisiae</i> succinate dehydrogenase	2004
Summer student (With Prof. Frederick G. West, Chemistry, University of Alberta) <ul style="list-style-type: none">• Conducted research on the total synthesis of the anti-cancer compound taxinine	2003

Contributions to Research and Development

• Refereed publications

20. Bakhtiary, A., Cochrane, S. A., Mercier, P., McKay, R. T., Miskolzie, M., **Sit, C. S.**, Vederas, J. C. Insights into the Mechanism of Action of the Two-Peptide Lantibiotic Lacticin 3147. *J. Am. Chem. Soc.*, **2017**, *139*, 17803-17810.
19. Van Arnem, E. B., Ruzzini, A. C., **Sit, C. S.**, Horn, H., Pinto-Tomás, A. A., Currie, C. R., Clardy, J. Selvamycin, an atypical antifungal polyene from two alternative genomic contexts. *Proc. Natl. Acad. Sci. U. S. A.* **2016**, *113*, 12940-12945.
18. Lear, S., Munshi, T., Hudson, A. S., Hatton, C., Clardy, J., Mosely, J. A., Bull, T. J., **Sit, C. S.**, Cobb, S. L. Total chemical synthesis of lassomycin and lassomycin-amide. *Org. Biomol. Chem.*, **2016**, *14*, 4534-4541.
17. Van Arnem, E. B., Ruzzini, A. C., **Sit, C. S.**, Currie, C. R., Clardy, J. A rebeccamycin analog provides plasmid-encoded niche defense. *J. Am. Chem. Soc.*, **2015**, *137*, 14272-14274.
16. ***Sit, C. S.**, *Ruzzini, A. C., Van Arnem, E. B., Ramadhar, T. R., Currie, C. R., Clardy, J. Variable genetic architectures produce virtually identical molecules in bacterial symbionts of fungus-growing ants. *Proc. Natl. Acad. Sci. U. S. A.* **2015**, *112*, 13150-13154.
*The first and second authors contributed equally to this work.
15. Cobb, S. L., **Sit, C. S.** Anti-infective peptides. In *Advances in the discovery and development of peptide therapeutics*; Kruger, G., Albericio, F., De Vooght-Johnson, R., Eds.; Future Science: London, 2014; Chapter 6, 96-110.
14. *Gavriš, E., ***Sit, C. S.**, Cao, S., Kandror, O., Spoering, A., Peoples, A., Ling, L., Fetterman, A., Hughes, D., Bissell, A., Torrey, H., Akopian, T., Mueller, A., Epstein, S., Goldberg, A., Clardy, J., Lewis, K. Lassomycin, a ribosomally synthesized peptide, kills *Mycobacterium tuberculosis* by targeting the ATP-dependent protease ClpC1P1P2. *Chem. Biol.* **2014**, *21*, 509-518.
*The first and second authors contributed equally to this work.
13. Lohans, C. T., van Belkum, M. J., Cochrane, S. A., Huang, Z., **Sit, C. S.**, McMullen, L. M., Vederas, J. C. Biochemical, structural, and genetic characterization of tridecaptin A1, an antagonist of *Campylobacter jejuni*. *ChemBioChem* **2014**, *15*, 243-249.
12. Lohans, C. T., Huang, Z., van Belkum, M. J., Giroud, M., **Sit, C. S.**, Steels, E. M., Zheng, J., Whittall, R. M., McMullen, L. M., Vederas, J. C. Structural characterization of the highly cyclized lantibiotic paenicidin A via a partial desulfurization/reduction strategy. *J. Am. Chem. Soc.* **2012**, *134*, 19540-19543.
11. Lama, A., Pane-Farre, J., Chon, T., Wiersma, A. M., **Sit, C. S.**, Vederas, J. C., Hecker, M., Nakano, N. M. Response of methicillin-resistant *Staphylococcus aureus* to amicoumacin A. *PLoS One* **2012**, *7*, e34037.
10. **Sit, C. S.**, Lohans, C. T., van Belkum, M. J., Campbell, C. D., Miskolzie, M., Vederas, J. C. Substitution of a conserved disulfide in the type IIa bacteriocin, Leucocin A, with L-leucine and L-serine residues: effects on activity and three-dimensional structure. *ChemBioChem* **2012**, *13*, 35-38.

9. **Sit, C. S.**, van Belkum, M. J., McKay, R. T., Worobo, R. W., Vederas, J. C. The 3D solution structure of thurincin H, a bacteriocin with four sulfur to alpha-carbon crosslinks. *Angew. Chem.Int. Ed.* **2011**, *50*, 8718-8721.
8. **Sit, C. S.**, McKay, R. T., Hill, C., Ross, R. P., Vederas, J. C. The 3D structure of thuricin CD, a two-component bacteriocin with cysteine sulfur to α -carbon cross-links. *J. Am. Chem. Soc.* **2011**, *133*, 7680-7683.
7. **Sit, C. S.**, Yoganathan, S., Vederas, J. C. Biosynthesis of aminovinyl-cysteine containing peptides and its application in the production of potential drug candidates. *Acc. Chem. Res.* **2011**, *44*, 261-268.
6. Yoganathan, S., **Sit, C. S.**, Vederas, J. C. Chemical synthesis and biological evaluation of gallidermin-siderophore conjugates. *Org. Biomol. Chem.* **2011**, *9*, 2133-2141.
5. Martin-Visscher, L. A., Yoganathan, S., **Sit, C. S.**, Lohans, C., Vederas, J. C. The activity of bacteriocins from *Carnobacterium maltaromaticum* against Gram-negative bacteria in combination with EDTA treatment. *FEMS Microbiol. Lett.* **2011**, *317*, 152-159.
4. *Rea, M. C., ***Sit, C. S.**, Clayton, E., O'Connor, P. M., Whittal, R. M., Zheng, J., Vederas, J. C., Ross, R. P., Hill, C. Thuricin CD, a post-translationally modified bacteriocin with a narrow spectrum of activity against *Clostridium difficile*. *Proc. Natl. Acad. Sci. U.S.A.* **2010**, *107*, 9352-9357. *The first and second authors contributed equally to this work.
3. Huang, T., Geng, H., Miyyapuram, V. R., **Sit, C. S.**, Vederas, J. C., Nakano, M. M. Isolation of a variant of subtilisin A with haemolytic activity. *J. Bacteriol.* **2009**, *191*, 5690-5696.
2. **Sit, C. S.**, Vederas, J. C. Approaches to the discovery of new antibacterial agents based on bacteriocins. *Biochem. Cell Biol.* **2008**, *86*, 116-123.
1. Oyedotun, K. S., **Sit, C. S.**, Lemire, B. D. The *Saccharomyces cerevisiae* succinate dehydrogenase does not require heme for ubiquinone reduction. *BBA Bioenergetics* **2007**, *1767*, 1436-1445.

- **Patents**

1. Antifungal Compounds. Provisional International Patent No. PCT/US17/35697. Co-inventor.

- **Conference presentations**

14. **Sit, C. S.** "Simulating microbial competition in the laboratory as a means to accelerate natural products discovery" accepted for oral presentation at the *100th Canadian Chemistry Conference and Exhibition*, Toronto, ON, Canada, June 2017.
13. **Sit, C. S.**, Van Arnam, E. B., Ruzzini, A. C., Currie, C. R., Clardy, J. "Antifungal compounds with diverse activity profiles from a bacterial symbiont of a fungus-growing ant" accepted for oral presentation at the *99th Canadian Chemistry Conference and Exhibition*, Halifax, NS, Canada, June 2016.
12. **Sit, C. S.**, Ruzzini, A. C., Currie, C. R., Clardy, J. "Gerumycin: a plasmid-borne cyclic depsipeptide in a fungus-growing ant symbiosis" accepted for oral presentation at the *98th Canadian Chemistry Conference and Exhibition*, Ottawa, ON, Canada, June 2015.

11. **Sit, C. S.**, Clardy, J. "The three-dimensional structure of lassomycin, a peptide active against *Mycobacterium tuberculosis*" accepted for oral presentation at the *97th Canadian Chemistry Conference and Exhibition*, Vancouver, BC, Canada, June 2014.
10. **Sit, C. S.**, Ramadhar, T. R., Clardy, J. "The search for novel antimicrobial metabolites from *Pseudonocardia*" accepted for poster presentation at the *Gordon Research Conferences – New Antibacterial Discovery & Development*, Ventura, CA, USA, March 2014.
9. **Sit, C. S.**, Cao, S., Clardy, J. "The three-dimensional structure of lassomycin, a peptide active against *Mycobacterium tuberculosis*" accepted for poster presentation at the *Gordon Research Conferences – Bioorganic Chemistry*, Andover, NH, USA, June 2013.
8. **Sit, C. S.**, Vederas, J. C. "3-D structure of thuricin CD, a two-component antimicrobial peptide" accepted for oral presentation at *The 2010 International Chemical Congress of Pacific Basin Societies*, Honolulu, HI, USA, December 2010.
7. **Sit, C. S.**, Rea, M. C., O'Connor, P. M., Hill, C., Ross, R. P., Vederas, J. C. "Structural elucidation of thuricin, a two-component antimicrobial peptide" accepted for poster presentation at the *Keystone Symposia on Molecular and Cellular Biology – Antibiotics and Resistance*, Santa Fe, NM, USA, February 2010.
 - This abstract was awarded a travel scholarship (\$1000 USD) by Keystone Symposia organizers.
6. **Sit, C. S.**, Rea, M. C., O'Connor, P. M., Hill, C., Ross, R. P., Vederas, J. C. "Structural elucidation of thuricin, a two-component antimicrobial peptide" accepted for poster presentation at the *42nd International Union of Pure and Applied Chemistry (IUPAC) Congress*, Glasgow, Scotland, UK, August 2009.
5. **Sit, C. S.**, Rea, M. C., O'Connor, P. M., Hill, C., Ross, R. P., Vederas, J. C. "Structural elucidation of thuricin, a two-component antimicrobial peptide" accepted for oral presentation at the *92nd Canadian Chemistry Conference and Exhibition*, Hamilton, ON, Canada, June 2009.
4. **Sit, C. S.**, Rea, M. C., O'Connor, P. M., Hill, C., Ross, R. P., Vederas, J. C. "Structural elucidation of thuricin, a two-component antimicrobial peptide" accepted for oral presentation at the *18th Volcano Conference in Bioorganic Chemistry*, Pack Forest, WA, USA, March 2009.
3. **Sit, C. S.**, Rea, M. C., O'Connor, P. M., Hill, C., Ross, R. P., Vederas, J. C. "Structural elucidation of thuricin, a two-component antimicrobial peptide" accepted for poster presentation at the *30th European Peptide Symposium*, Helsinki, Finland, Sept. 2008.
2. **Sit, C. S.**, Rea, M. C., O'Connor, P. M., Hill, C., Ross, R. P., Vederas, J. C. "Structural elucidation of thuricin, a two-component antimicrobial peptide" accepted for poster presentation at the *Advanced Foods and Materials Network 4th Annual Scientific Conference*, Vancouver, Canada, June, 2008.
 - This poster presentation was awarded 1st prize (\$300) in the conference's poster competition.
1. **Sit, C. S.**, Rea, M. C., O'Connor, P. M., Hill, C., Ross, R. P., Vederas, J. C. "Structural elucidation of thuricin, a two-component antimicrobial peptide" accepted for poster presentation at the *91st Canadian Chemistry Conference and Exhibition*, Edmonton, AB, Canada, May 2008.

- **Invited talks**

8. "Discoveries and applications of chemical ecology: a tale of ants, bees, bats, and grape vines" at the Department of Chemistry, University of New Brunswick, Fredericton, NB, October 30, 2017.

7. "Probing the chemical ecology of microbes for new natural products, and for a better understanding of ants, bees, and bats" at the Department of Microbiology and Immunology, Dalhousie University, Halifax, NS, September 25, 2017.
6. "Chemical ecology: promoting symbiotic survival and inspiring natural product drug discovery" at the Department of Biology, Dalhousie University, Halifax, NS, March 30, 2017.
5. "Natural products discovery from bacterial symbionts of fungus growing ants" at the Department of Chemistry and Department of Biomedical Sciences, University of Prince Edward Island, Charlottetown, PEI, December 1, 2016.
4. "Cage-fighting for microbes: how to use chemical ecology to accelerate natural products drug discovery" at the Department of Biology, Saint Mary's University, Halifax, NS, November 18, 2016.
3. "Bioassay-driven discovery of peptide and small molecule natural products" at the Department of Biochemistry, Dalhousie University, Halifax, NS, November 16, 2016.
2. "Discovery of bioactive natural products from non-traditional sources" at the Department of Gastroenterology, Beth Israel Deaconess Medical Center, Boston, MA, March 2, 2016.
1. "The role of natural products in ant ecology and drug discovery" at the Department of Chemistry, University of New Hampshire, Durham, NH, February 23, 2016.

- **Conference presentations by trainees**

1. **9th Annual Maritimes Natural Products Conference, Charlottetown, PEI, August 2017**

<i>Trainee</i>	<i>Presentation type and title</i>
Morgan Crosby	Talk – "Pairwise assay investigation of microbial isolates from Nova Scotian honey bees as potential biocontrols for AFB causing bacterium <i>Paenibacillus larvae</i> "
Jennifer Kolwich	Talk – "Utilizing micro-ecological activity against bat pathogen <i>Psuedogymnoascus destructans</i> as a means of discovering novel antimicrobial compounds"
Kaitlyn Blatt-Janmaat	Poster – "Porous, pyrogenic material as a vector for targeted, beneficial microbe delivery to the rhizosphere" * Top Poster Presentation of the conference (\$50)
Julie Anne Dayrit	Poster – "Pairwise testing of <i>Lentzea</i> strains against <i>Mycobacterium smegmatis</i> to search for new anti-tuberculosis compound"

- **Conferences attended**

3. 5th Atlantic Canada Wine Symposium, Halifax, NS, June 2017
2. 8th Annual Maritimes Natural Products Conference, Halifax, NS, August 2016
 - Served as a judge for the student oral presentation competition
1. 42nd Annual Science Atlantic/ CSC Student Chemistry Conference, St. John's, NL, May 2017
 - Served as a judge for the biological/medicinal and organic chemistry graduate and undergraduate student talks and poster competitions

- **Manuscripts reviewed**

3. cjc-2017-0573 ("The Expansive Library of Jadomycins") for *Canadian Journal of Chemistry* (NRC Research Press; 2015 impact factor = 1.003)

2. JFF-D-17-00430R1 (“Chemical characterization of cytotoxic compounds from mulberry fruit against human cervical cancer”) for *Journal of Functional Foods* (Elsevier; 2015 impact factor = 3.973), April 2017
1. BIOORG_2016_295 (“Renoprotective chemical constituents from an edible mushroom, *Pleurotus cornucopiae* in cisplatin-induced nephrotoxicity”) for *Bioorganic Chemistry* (Elsevier; 2015 impact factor = 2.252), January 2017

Grants, Awards, and Achievements

All values given in Canadian dollars (CAD)

• External grants

Year	Award	Type	Value
2017-2022	NSERC Discovery Grant – “The chemical origins of biological interactions: an evolutionarily refined approach for natural products discovery”	Federal funding	\$165,000
2017	CFI John Evans Leadership Fund – Quadrupole time-of-flight mass spectrometer (QTOF)	Federal funding	\$171,204
2017	Nova Scotia Research and Innovation Trust – matching funds for QTOF	Provincial funding	\$114,135
2018-2023	NSERC CREATE Training Program in BioActives: Professionals for Drug Discovery and Development – Co-applicant (with Dr. Alison Thompson and others from Dalhousie University)	Federal funding	Awaiting decision
2018	Springboard Atlantic Innovation Mobilization Program: Proof of Concept – “Biochar based delivery of beneficial bacteria to grape vines”	Federal & Institutional funding	Awaiting decision
2018-2021	Nova Scotia Health Research Fund Establishment Grant – “Accelerating the discovery of new treatments for drug resistant healthcare associated infections” (\$150k)	Provincial funding	Awaiting decision

• Internal grants at Saint Mary’s University

Year	Award	Type	Value
2018	SMUworks funding for research and teaching assistant	Competitive	\$5577
2017	SMUworks funding for research assistant	Competitive	\$3559
2017	SMU Internal Grant for new faculty	Competitive	\$5000
2016	SMUworks funding for research assistant	Competitive	\$3528
2016	Start-up funding from Dean of Science	Negotiated	\$70,000

• Postdoctoral fellowships

Year	Award	Type	Value
2012-2014	NSERC Banting Post-Doctoral Fellowship	National	\$140,000
2012-2015	AIHS Full-Time Fellowship	Provincial	\$80,000

- **Graduate awards and scholarships**

Year	Award	Type	Value
2012	Faculty of Science Doctoral Dissertation Award	Institutional	N/A
2011	Andrew Stewart Memorial Graduate Prize	Institutional	\$5,000
2010	Ralph Steinhauer Award of Distinction	Provincial	\$20,000
2010	Margaret Brine Graduate Scholarship	Private	\$6,000
2008	Ralph Steinhauer Award of Distinction	Provincial	\$20,000
2008 – 2010	NSERC Post Graduate Scholarship D	National	\$42,000
2008 – 2010	President's Doctoral Prize of Distinction	Institutional	\$14,600
2008 – 2011	AHFMR Studentship Award (renewable up to 5 years)	Provincial	\$6,300/yr
2006 – 2008	Walter H. Johns Graduate Fellowship	Institutional	\$9,600
2007	NSERC CGS M Renewal and Stipend Increase	National	\$21,000
2006	NSERC Canada Graduate Scholarship M	National	\$17,500
2006	Professor Osman James Walker Memorial Scholarship	Institutional	\$1,700

- **Undergraduate research awards**

Year	Award	Type	Value
2006, 2005, 2003	AHFMR Summer Studentship Award	Provincial	\$1,125 each
2006, 2005, 2003	NSERC Undergraduate Student Research Award	Institutional	\$4,500 each
2004	AHFMR Summer Studentship Award	Provincial	\$5,200

- **Selected undergraduate scholarships**

Year	Award	Type	Value
2006	Dean's Silver Medal in Science	Institutional	Silver medal
2005, 2004	University of Alberta Undergraduate Scholarship	Institutional	\$1,000 each
2005, 2004, 2003	Jason Lang Scholarship	Provincial	\$1,000 each

Mentorship

(Supervisor = as principal investigator; Mentor = as post-doctoral fellow or graduate student)

- **Supervisor** – Saint Mary's University, 2017/09 ~ present
Supervising SMUworks Academic undergraduate student Lindsay Donovan for part time work assisting in the project entitled "Isolation and pairwise testing of little brown bat microbiome strains as a means to discover new antibacterial compounds"
- **Supervisor** – Saint Mary's University, 2017/05 ~ present
Supervising NSERC USRA winner and honours project student Kaitlyn Blatt-Janmaat for an undergraduate research project entitled "Incorporating mutualistic bacteria into biochar and evaluating its effects on plant growth"
- **Supervisor** – Saint Mary's University, 2017/05 ~ present
Supervising NSERC USRA winner and honours project student Jennifer Kolwich for an undergraduate research project entitled "Isolation and pairwise testing of little brown bat microbiome strains as a means to discover new antibacterial compounds"

- **Supervisor** – Saint Mary’s University, 2017/05 ~ present
Supervising NSERC USRA winner Morgan Crosby for an undergraduate research project entitled “Isolation and pairwise testing of honeybee microbiome strains to discover new antibiotics”
- **Supervisor** – Saint Mary’s University, 2017/05 ~ present
Supervising NSERC USRA winner Julie Anne Dayrit for an undergraduate research project entitled “Pairwise testing of *Lentzea* strains to search for anti-tuberculosis compounds”
- **Co-supervisor** – Saint Mary’s University, 2017/05 ~ present
Co-supervising with Dr. Christa Brosseau an honours project student, Taylor Lynk, on an undergraduate research project entitled “Evaluation of Rapid Bacterial Screening using Electrochemical-SERS”
- **Mentor** – University of Alberta, 2010/05 ~ 2011/08
Mentored graduate student Christopher Lohans on how to isotopically label and purify antimicrobial peptides from bacteria, how to analyze the peptides by three-dimensional NMR, and how to calculate their solution structures.
- **Mentor** – University of Alberta, 2010/05 ~ 2010/08
Mentored two undergraduate students, Erika Steels and Landon Kymson – advising them in their research projects of isolating and characterizing antimicrobial peptides from bacteria.
- **Mentor** – University of Alberta, 2010/01 ~ 2010/06
Mentored a co-op student, Maude Giroud, visiting from Switzerland – provided guidance in the management of her research project of isolating hemolytic factors from bacteria.
- **Mentor** – University of Alberta, 2008/05 ~ 2008/08
Mentored an undergraduate student, Anna Wiersma – provided guidance in her research project on the isolation and characterization of a small molecule antimicrobial compound.
- **Mentor** – University of Alberta, 2007/07 ~ 2007/08
Co-mentored a high school student, Tiffany Riddle, for the Women In Scholarship, Engineering, Science and Technology (WISEST) program – guided her in the purification of bacteriocins.

Teaching

- **Saint Mary’s University Graduate Committee Member**

Student	Degree	Date(s)
Garland Xie	MSc Applied Science candidate	2017/11 ~ present
Jeremy Bentley	MSc Applied Science candidate	2017/11 ~ present
Zach MacDougall	MSc Applied Science candidate	2017/12
Melanie Davidson	MSc Applied Science candidate	2017/05 ~ present
Brendan Grue	PhD Applied Science candidate	2017/04 ~ present
Thomas Steele	PhD Applied Science candidate	2016/09 ~ present

- **Saint Mary’s University Course and Lab Instructor**

Course	Description	Dates
CHEM 3451	Introductory Biochemistry 3 rd year undergraduate lecture & labs	Winter 2017 & 2018
CHEM 3443	Organic Reaction Mechanisms 3 rd year undergraduate lecture	Winter 2017
CHEM 2346	Organic Chemistry for Life Sciences 2 nd year undergrad lecture	Fall 2018
CHEM 234X	Organic Chemistry 2 nd year undergraduate labs	Fall 2017 & 2018

- **Lecturer** – Harvard Medical School, 2013/01 and 2014/01
Taught a 1 hour lecture (“Use of multidimensional NMR techniques for structure elucidation”) and led a small-group discussion for a day-long Chemical Biology graduate-level course, CB2200.
- **Graduate teaching assistant** – University of Alberta, 2008/09 ~ 2008/12
Tutored introductory general chemistry students one-on-one as part of help session seminars.
- **Teaching assistant** – University of Alberta, 2008/04, 2009/04, 2010/04
Taught for International Baccalaureate (IB) Outreach Program – supervised IB students for several laboratory experiments during their visit to the University of Alberta campus.
- **Graduate teaching assistant** – University of Alberta, 2006/09 ~ 2008/04
Taught one laboratory section each term, graded lab reports, and proctored and marked final exam papers for an introductory organic chemistry course.

Broadcast Interviews, Media and Press

- **Saint Mary’s University Halifax Facebook Ad** – “Research for our community: Dr. Clarissa Sit is developing techniques to deliver protective and supportive bacteria to Nova Scotia vineyards.”
2018/01/23, Facebook: <https://www.facebook.com/smuhalifax/videos/10156112398831543/>
- **"Four research projects in Halifax worth knowing about - Trying to discover new antibiotics from natural sources to help combat antibiotic-resistant bacteria, viruses and other micro-organisms"**, 2017/08/31, The Coast - Halifax newspaper <https://www.thecoast.ca/halifax/four-research-projects-in-halifax-worth-knowing-about/Content?oid=9152391>
- **"How honeybees and bats could be weapons to fight superbugs"** - CFI JELF award for a high resolution mass spectrometer and how it will support antibiotics research at Saint Mary's University, 2017/08/17, CBC Information Morning - Nova Scotia <http://www.cbc.ca/listen/shows/information-morning-ns/segment/13724864>, CBC Radio
- **"SMU professor’s \$171k award is sign of hope for other women in research"**, 2017/08/17, Chronicle Herald Nova Scotia newspaper: <http://thechronicleherald.ca/novascotia/1495174-smuprofessor%E2%80%99s-171k-award-is-sign-of-hope-for-other-women-in-research>
- **"Scientist looking to bats and bees in fight against antibiotic-resistant superbugs"**, 2017/08/17, CBC website: <http://www.cbc.ca/news/canada/nova-scotia/saint-marys-university-superbugsspectrometer-bats-bees-bacteria-1.4251293>
- **"Saint Mary’s chemistry professor receives federal funding for her antibiotic research"**, 2017/08/15, Saint Mary's University website: <https://news.smu.ca/news/2017/8/15/saint-maryschemistry-professor-receives-federal-funding-for-her-antibiotic-research>

Outreach

- **Let’s Talk Biochemistry WISEly Symposium** – 2016/10/07
Presented a talk (“What can ants teach us about medicine?”) to junior high students at a Women In Science and Engineering (Atlantic Canada Division) symposium at Mount Saint Vincent University, Halifax, NS

- **Science Literacy Week lecture** – 2016/09/20
Gave a lecture (“What can ants teach us about medicine?”) at the Halifax Central Public Library as a part of Science Literacy Week in Halifax, NS
- **“Science Files” radio show** – 2016/09/17
Served as the main guest for an episode of “Science Files” on 95.7 FM (Halifax, NS) to discuss drug resistance and current research into discovering new antibiotics

Selected examples of university and departmental service

- **Union observer** – 2017/02 ~ present
Serving as a union observer on behalf of the Saint Mary’s University’s Faculty Union (SMUFU) during university review committees for tenure and promotion. Responsibilities include: ensuring that the university review committees follow the procedures for tenure and promotion hearings (as outlined in the collective agreement); summarizing the committee proceedings for SMUFU records.
- **Selection committee member** – 2016/11 ~ 2017/03
Served on the departmental selection committee for a tenure-track faculty position in physical/analytical chemistry.
- **Departmental co-op representative** – 2016/07 ~ present
Serving as a the liason between the Department of Chemistry and Saint Mary’s University’s Co-op office. Responsibilities include: approving of co-op job postings for chemistry students and reading co-op students’ final reports on their work experiences.
- **Departmental Science Atlantic representative** – 2016/07 ~ present
Serving as the representative for Saint Mary’s Chemistry at Science Atlantic meetings. Science Atlantic is a non-profit organization that aims to “advance post-secondary science education and research in Atlantic Canada.”

Selected examples of professional development

- **“Knowledge Mobilization” session with Dr. Christine Chambers** – 2017/05
- **“Narrative Tactics for Research Success” session with Dr. Adrian Kelly** – 2017/05
- **“Psychological Fitness” by Dr. Kevin Kelloway** – 2017/04
- **“Emergency Management Policy and Awareness Plan Info Session”** – 2016/11
- **“Mental Health 101: Identifying and Responding to Students in Distress”** – 2016/11
- **“Saint Mary’s University’s New Faculty Orientation”** – 2016/08

Language Proficiency

- **English** – Fluent.
- **French** – Can speak, read and write French with moderate proficiency.
Highest level of French education attained: Certificate in International Baccalaureate French, Standard Level.
- **Cantonese** – Fluent in spoken Cantonese; can read and write Chinese to a limited extent.
- **American Sign Language** – Can sign and comprehend basic vocabulary in ASL.