

I. General data

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Nationality Mexican / Canadian

Language Fluent in Spanish and English

II. Education & Training

Oct/2005 – Sep/2008 Postdoctoral Fellow in Medicinal Chemistry; Laboratory of Comparative Carcinogenesis, National Cancer Institute at Frederick, MD USA. Supervisor: Dr. Larry K. Keefer. Project: “Development of new nitric oxide-releasing anti-inflammatory drugs possessing a *N*-diazene-1-ium-1,2-diolate moiety”.

Sep/2001 – Oct/2005 Ph.D. Pharmaceutical Sciences (Medicinal Chemistry); Faculty of Pharmacy and Pharmaceutical Sciences, University of Alberta, Canada. Supervisor: Dr. Edward E. Knaus. Thesis: “Nitric oxide releasing calcium channel modulators and non-steroidal anti-inflammatory drugs possessing a *N*-diazoniumdiolate moiety.”

Sep/1994 – Jul/1997 M. Sc. Pharmaceutical Chemistry, Faculty of Chemistry, National Autonomous University of Mexico. Supervisor: Rafael Castillo-Bocanegra. Thesis: “Design and synthesis of methyl *N*-phenyl carbamate with potential anthelmintic activity.”

Sep/1989 – Aug/1994 B. Sc. Pharmaceutical Chemistry, Faculty of Chemical Sciences, University of Guadalajara, México. Supervisor: Pedro Velázquez-Ponce. Thesis: “Design and synthesis of 2-nitroimidazole derivatives with potential trypanocidal activity”.

III. Academic appointments

Jul/2014 – Current	Associate Professor, Faculty of Pharmacy and Pharmaceutical Sciences, University of Alberta, Canada.
Oct/2008 – Jun/2014	Assistant Professor, Faculty of Pharmacy and Pharmaceutical Sciences, University of Alberta, Canada.
Sep/1995 – Aug/1996	Assistant Professor, Faculty of Chemistry, National Autonomous University of Mexico, Mexico City.

IV. Awards and Honors

2006, 2007 & 2008	Federal Technology Transfer Award. National Cancer Institute, Maryland, US.
2005	Graduate Intern Tuition Supplement. University of Alberta, Canada.
2004	Mike Wolowik Graduate Scholarship. University of Alberta, Canada.
2004	Arthritis Association of Edmonton Graduate Scholarship. Edmonton, Canada.
2002, 2003	Shoppers Drug Mart Graduate Scholarship in Pharmaceutical Sciences. University of Alberta, Canada.
2002	Pharmacy Ph.D. Alumni Graduate Student Scholarship. University of Alberta, Canada.
2002	Novartis Pharmaceuticals Canada Inc. Graduate Scholarship. University of Alberta, Canada.
2001-2004	National Council of Science and Technology Scholarship. CONACYT, México.
1994-1996	National Council of Science and Technology Scholarship. CONACYT, México.

V. Professional organizations

Canadian Society for Chemistry (CSC)	Member.
Canadian Society for Pharmaceutical Sciences (CSPS)	Member. Board of Directors (Jan 2014 – Dec 2015).
Mexican Chemical Society (SQM)	Member. Associate Editor for the Journal.

VI. Student Supervisions*Graduate students (last, first name)*

Name (Last, first)	Degree	Period	Thesis title	Graduated	Current Position
Jain, Sarthak	M. Sc.	Sep/2009 Aug/2011	NSAID prodrugs with improved anti-inflammatory activity and low ulcerogenic: wake up call to pharmaceutical companies and health authorities.	Yes	Ph.D. student, University of Edinburgh
Aldawsari, Fahad	PhD	Jan/2010 – Jan 2016	Design, synthesis and biological evaluation of aspirin-like resveratrol derivatives.	Yes	Saudi Food and Drug Administration
Rodríguez, Alexandra	MSc	May/2012 – current	Pharmacological modulation of the FOXM1 transcription factor in cancer chemoprevention and treatment.	Yes	-
Elshaikh, Asya	MSc	Dec/2014 – current	Biological evaluation of FDA-approved drugs on the transcriptional activity of the FOXM1 transcription factor.	No	-
Tabatabaei, Amirhossein	PhD	May/2015 – current	Chemical modulation of the FOXM1 transcription factor in cancer treatment and prevention	No	-

Visiting students (last, first name)

Last, first name	From	Period	Degree	Current Position
Ozadali, Keriman	Hacettepe University, Turkey	Jun - Sep/2009	PhD	Assistant Professor, Hacettepe University, Turkey
Farag, Ayman	Cairo University, Egypt	May-Sep/2011	PhD	Postdoctoral fellow, Cairo University
Ullah, Nasir	University of Peshawar, Pakistan	Aug/2011 – Jan/2012	PhD	Graduated in July 2012
Amorim, Michael	University of Sao Paulo, Brazil	Jan – July/2014	MSc	Staff chemist at “Natura Cosmetics,” Brazil.
Aguayo, Rodrigo	UNAM, Mexico	Jun – Aug/2014	MSc	Graduated in December 2014.
Marques, Luiz	University of Maringa, Brazil	Jan – Dec/2014	PhD	He graduated in February 2015.
Zhang, Minzhe	Zhejiang University, China	Jul – Sep/2014	MSc	Ph.D. student in China
Loredo-Calderon, Erika	The Autonomous University of Nuevo Leon.	July 2016 – June 2017	PhD	Ph.D. student in Mexico

Undergraduate students

Name (Last, first)	Description	Period	Current position
Tran, Susan	PHARM 498 student	May – Aug/2011	Staff Pharmacist at Strathcona Prescription Center
Tzeggal, Sennait	Summer student (Faculty of Science, Dept. of Biological Sciences, U. of A.)	May – Aug/2012	Graduated (summer 2012) from the U. of A.
Teoh, Zach	Summer student (Faculty of Science, Dept. of Biological Sciences, U. of A.)	July 16-Aug17, 2012	Second-year undergrad student (U. of A.), Faculty of Science.
Anchuri, Kavya	High school student	July 2-August 17, 2012	High school student.
Isenor, Karen	PHARM 498 student	Sep – Dec 2012	She is a Clinical Pharmacist at Amherst Pharmasave in Nova Scotia.
Cheng, Stephanie	PHARM 498 student	Jan – Apr 2013	“Floater” Pharmacist at Safeway, southern Alberta.
Lamarche, Brendon	Summer student	May – Aug 2014	He is an undergraduate student at the Faculty of Science (U of A).
Giga, Searra	Summer student	May – August 2016	Undergraduate Pharmacy student (Class of 2019).
Deacon, Tyeren	Summer student	May – August 2017	Undergraduate Pharmacy student (Class of 2020).

Significant awards received by my students during their tenure:

Sean Larade	Alberta Cancer Foundation Summer Studentship.
Sarthak Jain	Dr. Ronald Micetich Memorial Graduate Scholarship
Fahad Aldawsari	Saudi Government Scholarship
Alexandra Rodríguez	National Council of Science and Technology (CONACYT) Scholarship
Keriman Ozadali	Scientific and Technical Research Council of Turkey (TUBITAK) Scholarship
Nasir Ullah	Higher Education Commission of Pakistan Scholarship & Bench Fee
Amirhossein Tabatabaei	Antoine Noujaim Graduate Scholarship in Pharmaceutical Sciences

VII. Postdoctoral fellow supervisions.

Name (Last, first)	Description	Period	Current position
Perez, David	Dr. Perez started his training as a postdoctoral fellow in my research group on October 18 th , 2016. The National Council of Science and Technology (CONACYT, Mexico) provided a fellowship for 12 months (November 2016 to October 2017) to research the chemical synthesis and biological evaluation of nucleotide-based FOXM1 inhibitors.	Nov 2016 – Oct 2017	Currently working in Alberta

VIII. Supervisory Committees

Candidate (Last, First name)	Committee	Degree / Supervisor	Date
Sullivan, Erin	Supervisory	Ph.D. / Dr. Tykwinski ¹	2008 – 2011
Bhandari, Krishna	Supervisory	Ph.D. / Dr. Doschak ²	2008 – 2012
Soudy, Rania	Supervisory	Ph.D. / Dr. Kaur ²	2008 – 2012
El Gendy, Mohamed	Supervisory	Ph.D. / Dr. El-Kadi ²	2008 – 2012
Aghazadeh, Ali	Supervisory	PhD / Dr. Jamali ²	2011 – 2014
Etayash, Hashem	Supervisory	MSc / Dr. Kaur ²	2011 – 2013
Tietz, Ole	Supervisory	Ph.D. / Dr. Wuest ³	2012 – 2015
Garg, Shyam	Supervisory	Ph.D. / Dr. Lavasanifar ²	Dec 2012 - Sep 2015
Asghar, Waheed	Supervisory	Ph.D. / Dr. Jamali ²	2010-2015
Way, Jenilee	Supervisory	MSc / Dr. Wuest ³	2011-2014
Lesyk, Gabriela	Supervisory	MSc / Dr. Jurasz ²	Jun 2014 – Current
Yan, Meng Jie	Supervisory	MSc / Dr. Jurasz ²	Aug 2014 – Current
Valdivieso-Ramirez, Carla	Supervisory	MSc / Dr. Aranda-Saldana ⁴	2015-2016
Bernard-Gauthier, Vadim	Supervisory	Ph.D./Dr. Ralf Schirmacher ⁵	October 6 th , 2015
Meng Jie Yan	Supervisory	M. Sc. / Dr. Jurasz ²	Sep 2014 - Sep 2016

¹Department of Chemistry, Faculty of Science, University of Alberta.²Faculty of Pharmacy and Pharmaceutical Sciences, University of Alberta.³Cross Cancer Institute, University of Alberta-Alberta Health Services.⁴Agriculture/Forestry, University of Alberta.⁵Department of Oncology, Faculty of Medicine and Dentistry, University of Alberta.

IX. Exam Committees

Candidate (Last, First name)	Committee	Degree / Supervisor	Date
Zheng, Ben	Exam	Ph.D. / Dr. Hall ¹	Apr/2010 – Aug/2012
Ahmed, Sahar	Exam	Ph.D. / Dr. Kaur ²	May/2010
Soliman, Wael	Exam	Ph.D. / Dr. Kaur ²	Mar/2011
Zou, Lu	Exam	M.Sc. / Dr. Lowary ¹	Sep/2011
Amara, Isaa	Exam	Ph.D. / Dr. El-Kadi ²	Nov/2011
Raghuwanshi, Dharmendra	Exam	Ph.D. / Dr. Kaur ²	July 27 th , 2012
Shahin, Mostafa H.	Exam	Ph.D. / Dr. Kaur ²	Sep 21 st , 2012
Etayash, Hashem	Exam	Ph.D. / Dr. Kaur ²	Oct 2 nd , 2012
Marshall, Alison	Exam	M.Sc. / Dr. Wuest ³	Jul 21 st , 2014
Dharmaraja, A.	Exam	PhD / Dr. Chakrapani ⁴	Jan 30 th 2015
Almukainzi, May	Exam	Ph.D. / Dr. Loebenberg ²	May 5 th , 2015
Meng Jie Yan	Exam	M. Sc. / Dr. Jurasz ²	Sep 28 th 2016
Amel Hamza	Supervisory	M. Sc. / Dr. Doschak	February 3 rd 2017
Srijan Raha	Exam	M. Sc. / Dr. John Lewis ⁵	April 24 th 2017
Marwa Al-Agili	Exam	M. Sc. / Dr. Dion Brocks	May 16 th 2017
Horia Jalily	Exam	M. Sc. / Dr. Khaled Barakat	August 29 th 2017
Samantha Leier	Supervisory	M. Sc. / Dr. Frank Wuest	September 9 th 2017

¹Department of Chemistry, Faculty of Science, University of Alberta.

²Faculty of Pharmacy and Pharmaceutical Sciences, University of Alberta.

³Cross Cancer Institute, University of Alberta-Alberta Health Services.

⁴Indian Institute of Science Education and Research (IISER, Pune, India).

⁵Faculty of Medicine and Dentistry, University of Alberta.

X. Service in Committees*Faculty of Pharmacy and Pharmaceutical Sciences*

2009 – 2010	Academic Standards Committee (Accreditation Committee).
2009 – 2012	Undergraduate Admissions Committee.
2009 – 2012	Undergraduate Awards Committee.
2009 – 2013	Assessment Committee.
2011 – 2013	Faculty Development Seminar Series Committee.
2013 – 2014	APSA Faculty Representative.
2013 – 2015	International Committee.
2013 – Current	Graduate Studies Committee.
2014 – Current	Working group for the new entry-to-practice PharmD curriculum.
2014 – Current	Curriculum Committee.

University of Alberta

2011 – 2013	Standing Advisory Committee on International Engagement (SACIE).
2011 – 2013	SACIE Graduate Program Subcommittee.
2011 – 2013	Education Abroad Award Committee.
Sep 2014 – Current	Standing Committee on Convocation.

Canada-wide

Mar 2017 – Feb 2019	Chair, Special Interest Group in Medicinal Chemistry . Association of Faculties of Pharmacy of Canada (AFPC).
2017	Awards Committee, AFPC (paper review).
2018	Awards Committee, AFPC (paper review).

XI. Teaching*Undergraduate courses*

Course	Term	Contact hours per term	Role
PHARM 307 (Dermatology)	Fall	1	Contributor
PHARM 367 (Cardiology)	Winter	4	Contributor
PHARM 417 (Neurology)	Fall	3	Contributor
PHARM 427 (Pain)	Winter	6	Coordinator / contributor
PHARM 447 (Psychiatry)	Winter	4	Contributor
PHARM 467 (Oncology)	Fall	2	Contributor
PHARM 487 (Pulmonary)	Fall	1	Contributor
PHARM 497 (Endocrine)	Winter	4	Contributor
PHARM 498 (Directed project)	Summer	20	Contributor

Graduate courses

Course	Term	Contact hours	Role
PHARM 570 (Advanced Spectroscopic Analysis)	Fall	20	Coordinator / contributor
PHARM 624 (Applications of NMR Spectroscopy to Pharmaceutical and Medicinal Chemistry)	Fall	48	Coordinator / contributor
PHARM 697 (Short seminar)	Fall & Winter	26	Coordinator / contributor
PHARM 698 (Advanced seminar)	Fall/Winter	6 ^a	Coordinator
PHARM 694 (Directed Project)	Fall	4 ^b	Contributor

^aAverage per term; contact hours may vary depending on the number of students presenting their long seminar.

^bThese are not class hours; this time refers to the number of hours dedicated to read and mark projects from students enrolled in this course.

XII. Service in Professional Associations.

Jan/2014 – Dec/2015	Board of Directors (Two-year term): Canadian Society for Pharmaceutical Sciences.
Jun/2014 – Current	Associate Editor: Journal for the Mexican Chemical Society.

XIII. Research Interests: development of cancer chemopreventive/chemotherapeutic agents

My medicinal chemistry research program involves the design, synthesis, and biological evaluation of molecules that could potentially delay, inhibit, or cease carcinogenesis. I am particularly interested in experimental drugs with the ability to block the transcriptional activity of the oncogenic protein FOXM1:

Forkhead box M1 (FOXM1) transcription factor modulators.

FOXM1 is a transcription factor involved in cell replication; it is of the “master” regulators of cell cycle progression, particularly in the G1/S, and G₂-M phase. FOXM1 is essential to couple DNA replication, cycle control, and mitosis. However, it has been implicated in promoting multiple steps of cancer progression, including the induction of mitogenic and survival signals, as well as the induction of tumor invasion, migration, and angiogenesis. Consequently, FOXM1 has been regarded as a reliable marker for early cancer detection and a promising target for arresting cancer growth and progression, which are ideal characteristics of an effective chemopreventive or chemotherapeutic drug.

XIV. Research grants (active)

Title of the grant	Source	Role	Total amount	Period of support
"Bone-Targeting Peptide & Protein Hormones for Endocrine Bone Disorders"	CIHR	Co-PI	\$480,000	Sep 2017 – Aug 2020

XV. Research community**Reviewer for journals**

1. Anti-cancer Agents in Medicinal Chemistry
2. Bioorganic & Medicinal Chemistry
3. Bioorganic & Medicinal Chemistry Letters
4. Canadian Journal of Chemistry
5. Chemical Biology & Drug Design

6. Combinatorial Chemistry & High-throughput Screening
7. European Journal of Medicinal Chemistry
8. European Journal of Pharmaceutical Sciences
9. International Journal of Molecular Sciences
10. Journal of Biomedicine and Biotechnology
11. Journal of Medicinal Chemistry (ACS Publications)
12. Journal of Pharmacy and Pharmaceutical Sciences
13. Journal of the Mexican Chemical Society
14. Medicinal Chemistry
15. Medicinal Chemistry Communications
16. Medicinal Chemistry Letters (ACS Publications)
17. Medicinal Research Reviews
18. Mini-reviews in Medicinal Chemistry
19. Pharmaceutical Development and Technology

Reviewer for granting agencies

1. The Portuguese Foundation for Science and Technology (FCT; <http://www.fct.pt/>), grant application number: PTDC/QEQ-MED/0977/2012.
2. Portuguese Foundation for Science and Technology (FCT); grant application number: IF/00568/2014.

XVI. Publications

Refereed papers [published; (*) denotes work as the corresponding author]

1. Tabatabaei-Dakhili, S. A.; Aguayo-Ortiz, R.; Dominguez, L.; Velazquez-Martinez, C. A. Untying the knot of transcription factor druggability: Molecular modeling study of FOXM1 inhibitors. *Journal of Molecular Graphics and Modeling* 80, 2018, 197-210.
2. Salla, M.; Aguayo-Ortiz, R.; Said, A.; Zare, A.; Pandya, V.; Manaloor, R.; Fong, S.; Blankstein, A. R.; Gibson, S. G.; Ramos-Garcia, L.; Meier, P.; Singh-Bhullar, K.; Hubbard, B.; Fiteh, Y.; Vliagoftis, H.; Goping, I. S.; Brocks, D.; **Velázquez-Martínez, C. A.**; Baksh, S. Identification and Characterization of Novel Receptor Interacting Serine/threonine-Protein Kinase 2 (RIPK2) Inhibitors Using Structural Similarity Analysis. *Journal of Pharmacology and Experimental Therapeutics* (*accepted*).
3. Aguiar, R. P.; Aldawsari, F. S.; Wiirzler, L. A. M.; Silva-Filho, S. E.; Silva-Comar, F. M. S.; Bersani-Amado, C. A.; **Velázquez-Martínez, C. A.** Cuman, R. K. N. Synthesis and biological evaluation of new tyrosol-salicylate derivatives as a potential anti-inflammatory agent, *Current Pharmaceutical Research*. In print.
4. Marques-Wiirzler, L. A.; Pazinato-Aguiar, R.; Bersani-Amado, C. A.; **Velázquez-Martínez, C. A.**; Nakamura-Cuman, R. K.; The Anticancer activity of eugenol is not related to regulation of the oncogenic transcription factor *Forkhead Box M1*. *Acta Scientiarum Health Sciences* 38, 2016, 159-163.

5. Goldhahn, K.; Kloesch, B.; Aldawsari, F. S.; **Velázquez-Martínez, C. A.**; Schmetterer, K.; Stainer, G. Resveratrol and resveratrol-salicylate hybrid molecule suppress cytokine production and proliferation of human CD4 + T-cells. *Annals of the Rheumatic Diseases* 75 (Suppl. 1), 2016, A60.1-A60.
6. Aldawsari, F. S.; Pazinato-Aguiar, R.; Marques-Wiirzler, L. A.; Aguayo-Ortiz, R.; Aljuhani, N.; Nakamura Cuman, R. K.; Medina-Franco, J. L.; Siraki, A. G.; **Velázquez-Martínez, C. A.*** Anti-inflammatory and Antioxidant Properties of a Novel Resveratrol-salicylate Hybrid Analogue. *Bioorganic & Medicinal Chemistry Letters* 26, 2016, 1411-1415.
7. Wisniewski-Rebecca, E. S.; Rocha, B. A.; Wiirzler, L. A. M.; Cuman, R. K. N.; **Velazquez-Martinez, C. A.**; Bersani-Amado, C. A. Synergistic effects of anethole and ibuprofen in acute inflammatory response, *Chemico-Biological Interactions* 242, 2015, 247-253.
8. Ullah, N.; Huang, Z.; Sanaee, F.; Rodriguez-Dimitrescu, A.; Aldawsari, F. S.; Jamali, F.; Bhardwaj, A.; Islam, N.; **Velázquez-Martínez, C. A.*** NSAIDs do not require the presence of a carboxylic acid to exert their anti-inflammatory effect – why do we keep using it? *Journal of Enzyme Inhibition & Medicinal Chemistry* 2015. ISSN: 1475-6366 (print), 1475-6374 (electronic).
9. Aldawsari, F. S.; Aguayo-Ortiz, R.; Kapilashrami, K.; Yoo, J.; Luo, M.; Medina-Franco, J. L.; **Velázquez-Martínez, C. A.*** Resveratrol-salicylate derivatives as selective DNMT3 inhibitors and anticancer agents *Journal of Enzyme Inhibition & Medicinal Chemistry* 2015. ISSN: 1475-6366 (Print) 1475-6374 (Online).
10. Chattopadhyay, M.; Nath, N.; Kodela, R.; Nesbitt, D. E.; **Velázquez-Martínez, C. A.**; Khosrow Kashfi. Hydrogen sulfide-releasing naproxen suppresses colon cancer cell growth and inhibits NF-κB signaling. *Drug Design, Development and Therapy* 9, 2015, 4873-4882.
11. Aldawsari, F. S. and **Velázquez-Martínez, C. A.*** 3,4',5-*trans*-Trimethoxystilbene; a natural analog of resveratrol with enhanced anticancer potency. *Investigational New Drugs* 33, 2015, 775–786.
12. Aldawsari, F. S.; Elshenawy, O. H.; El Gendy, M. A. M.; Aguayo-Ortiz, R.; Baksh, S.; El-Kadi, A. O. S.; **Velázquez-Martínez, C. A.*** Design and synthesis of resveratrol–salicylate hybrid derivatives as CYP1A1 inhibitors. *Journal of Enzyme Inhibition and Medicinal Chemistry* 30 (6), 2015, 884-895.
13. Matveychuk, D.; Nunes, E.; Ullah, N.; Velazquez-Martinez, C. A.; Baker, G. B. Elevation of rat brain tyrosine levels by phenelzine is mediated by its active metabolite β-phenylethylidenhydrazine. *Progress in Neuro-Psychopharmacology & Biological Psychiatry* (August) 53, 2014, 67-73.
14. Basudhar, D.; Bharadwaj, G.; Cheng, R.; Jain, S.; Sa, Shi; Ridnour, L.; Caceres, V.; Spadari-Bratfisch, R.; Paolocci, N.; **Velázquez-Martínez, C. A.**; Wink, D.; Miranda, K. Synthesis and chemical and biological comparison of nitroxyl- and nitric oxide-releasing diazeniumdiolate-based aspirin derivatives. *Journal of Medicinal Chemistry* (October) 56, 2013, 7804-7820. [Selected to be the cover for the November issue of this Journal.](#)
15. Matveychuk, D.; Nunes, E.; Ullah, N.; **Velázquez-Martínez, C. A.**; MacKenzie, E. M.; Baker, G. B. Comparison of phenelzine and geometric isomers of its active metabolite, β-phenylethylidenhydrazine, on rat brain levels of amino acids, biogenic amine neurotransmitters and methylamine. *Journal of Neural Transmission* (June) 2013, 120, 987-996.
16. Kodela, R.; Chattopadhyay, M.; Goswami, S.; Gan, Z. Y.; Nia, K. V.; Rao, P. N. P.; **Velázquez-Martínez, C. A.**; Kashfi, K. Positional isomers of aspirin are equally potent in inhibiting colon cancer cell growth: differences in mode of cyclooxygenase inhibition. *Journal of Pharmacology and Experimental Therapeutics* (April) 2013, 345, 85-94. [PMID: 23349335.](#)

17. Elgemeie, G.H.; Amin, K.M.; El-Badry, O.M.; Hassan, G.S.; Farag, A.B.; **Velázquez-Martínez, C. A.**; El-Kadi, A.O. Synthesis and in vitro antitumor activity of new imidazole and thienimidazole thioglycosides. *Journal of American Science* 2012, 8, 1071-1076.
18. Chenga, H.; Molica, M.; Wanga, L.; Wu, S.; **Velázquez-Martínez, C. A.*** Effects of nitric oxide-releasing nonsteroidal anti-inflammatory drugs (NONO-NSAIDs) on melanoma cell adhesion. *Toxicology and Applied Pharmacology* 264, 2012, 161-166. [Note: I share the credit with Dr. Wu (Ohio State University) who is also a corresponding author of this paper]. [PubMed ID: 22889880](#).
19. Jain, S.; Tran, S.; El Gendy M. A. M.; Kashfi, K.; Jurasz, P.; **Velázquez-Martínez, C. A.*** Nitric oxide release is not required to decrease the ulcerogenic profile of NSAIDs. *Journal of Medicinal Chemistry* 55, 2012, 688-696. [Pubmed ID: 22148253](#).
20. Özadalı, K.; Özkanlı, F.; Jain, S.; Rao, P. N. P.; **Velázquez-Martínez, C. A.*** Synthesis and biological evaluation of isoxazolo[4,5-d]pyridazin-4(5H)-one analogs possessing a 1,3,4-thiadiazole or 1,3,4-triazole-5-thione rings: dual inhibitors of cyclooxygenases and 5-lipoxygenase with anti-inflammatory activity. *Bioorganic & Medicinal Chemistry* 20, 2012, 2912-2922. [Pubmed ID: 22475926](#).
21. Chattopadhyay, M.; Kodela, R.; Nath, N.; Street, C. R.; **Velázquez-Martínez, C. A.**; Boring, D.; Kashfi, K. Hydrogen sulfide-releasing aspirin modulates xenobiotic metabolizing enzymes in vitro and in vivo. *Biochemical Pharmacology* 83, 2012, 733-740. [Pubmed ID: 22209714](#).
22. Chattopadhyay, M.; Kodela, R.; Nath, N.; Dastagirzada, Y. M.; **Velázquez-Martínez, C. A.**; Boring, D.; Kashfi, K. Hydrogen sulfide-releasing NSAIDs inhibit the growth of human cancer cells: A general property and evidence of a tissue type-independent effect. *Biochemical Pharmacology* 83, 2012, 715-722. [Pubmed ID: 22222427](#).
23. Flores-Santana, W.; Moody, T.; Chen, W.; Gorczynski, M. J.; Shoman, M. E.; **Velázquez-Martínez, C. A.**; Thetford, A.; Mitchell, J. B.; Cherukuri, M. K.; King, B.; Wink, D. Nitroxide derivatives of nonsteroidal anti-inflammatory drugs exert anti-inflammatory and superoxide dismutase scavenging properties in A459 cells. *British Journal of Pharmacology* 165(4b), 2012, 1058-1067. [Pubmed ID: 21658022](#).
24. Huang, Z.; **Velázquez, C.**; Abdellatif, K. R. A.; Chowdhury, M. A.; Reisz, J. A.; DuMond, J. F.; King, B. S.; Knaus, E. E. Ethanesulfohydroxamic acid ester prodrugs of nonsteroidal anti-inflammatory drugs (NSAIDs): synthesis, nitric oxide and nitroxyl release, cyclooxygenase inhibition, anti-inflammatory, and ulcerogenic index studies. *Journal of Medicinal Chemistry* 54, 2011, 1356-1364. [Pubmed ID: 21280601](#).
25. Abdellatif, K. R. A.; **Velázquez, C.**; Huang, Z.; Chowdhury, M. A.; Knaus, E. E. Triaryl (Z)-olefins suitable for radiolabeling with iodine-124 or fluorine-18 radionuclides for positron emission tomography imaging of estrogen positive breast tumors. *Bioorganic & Medicinal Chemistry Letters* 21, 2011, 1195-1198. [Pubmed ID: 21237640](#).
26. Chowdhury, M. A.; Huang, Z.; Abdellatif, K. R. A.; Dong, Y.; Yu, G.; **Velázquez, C.**; Knaus, E. E. Synthesis and biological evaluation of indomethacin analogs possessing a *N*-difluoromethyl-1,2-dihydropyrid-2-one ring system: A search for novel cyclooxygenase and lipoxygenase inhibitors. *Bioorganic & Medicinal Chemistry Letters* 20, 2010, 5776-5780. [Pubmed ID: 20727750](#).
27. Huang, Z.; **Velázquez, C.**; Abdellatif, K.; Chowdhury, M.; Jain, S.; Reisz, J.; DuMond, J.; King B.; Knaus, E. Acyclic triaryl olefins possessing a sulfohydroxamic acid pharmacophore: synthesis, nitric oxide/nitroxyl release, cyclooxygenase inhibition, and anti-inflammatory studies. *Organic & Biomolecular Chemistry* 8, 2010, 4124-4130. [Pubmed ID: 20664853](#).
28. Abdellatif, K. R. A.; **Velázquez, C.**; Huang, Z.; Chowdhury, M. A.; Knaus, E. E. Triaryl (Z)-olefins suitable for radiolabeling with carbon-11 or fluorine-18 radionuclides for positron emission

- tomography imaging of cyclooxygenase-2 expression in pathological disease. *Bioorganic & Medicinal Chemistry Letters* 20, 2010, 5245-5250. [Pubmed ID: 20655211](#).
29. Chattopadhyay, M.; **Velázquez, C.**; Pruski, A.; Nia, K. V.; Abdelatif, K.; Keefer, L. K.; Kashfi, K. Comparison between NO-ASA and NONO-ASA as safe anti-inflammatory, analgesic, antipyretic, antioxidant. *Journal of Pharmacology and Experimental Therapeutics* 335, 2010, 443-450. [Pubmed ID: 20679133](#).
30. Chattopadhyay, M.; Goswami, S.; Rodes, D. B.; Kodela, K.; **Velázquez, C.**; Boring, D.; Crowell, J. A.; Kashfi, K. (2010) NO-releasing NSAIDs suppress NF- κ B signaling in vitro and in vivo through S-nitrosylation. *Cancer Letters* 298, 2010, 204-211. [Pubmed ID: 20674154](#).
31. Abdellatif, K. R. A.; Chowdhury, M. A.; **Velázquez, C.**; Huang, Z.; Dong, Y.; Das, D.; Yu, G.; Suresh, M. R.; Knaus, E. E. Celecoxib prodrugs possessing a diazen-1-ium-1,2-diolate nitric oxide donor moiety: synthesis, biological evaluation, and nitric oxide release studies. *Bioorganic & Medicinal Chemistry Letters* 20, 2010, 4544-4549. [Pubmed ID: 20576432](#).
32. Yu, G.; Rao, P. N. P.; Chowdhury, M.; Abdellatif, K. R.; Dong, Y.; Das, D.; **Velázquez, C.**; Suresh, M. R.; Knaus, E. E. Synthesis and biological evaluation of *N*-difluoromethyl-1,2-dihydropyrid-2-one acetic acid regioisomers: dual inhibitors of cyclooxygenases and 5-lipoxygenase. *Bioorganic & Medicinal Chemistry Letters* 20, 2010, 2168-2173. [Pubmed ID: 20202839](#).
33. **Velázquez, C.**; Lynn, G.; Kumar, V.; Keefer, L.; Malhotra, S. "Arylation of 1-(pyrrolidin-1-yl) diazen-1-ium-1,2-diols (PYRRO/NO) in ionic liquids". *Synthetic Communications* 40, 2010, 1322-1332. [ISI: 000277738400009](#).
34. Chowdhury, M. A.; Abdellatif, K.; Dong, Y.; Yu, G.; Huang, Z.; Das, D.; **Velázquez, C.**; Suresh, M. R.; Knaus, E. E. Celecoxib analogs possessing a *N*-(4-nitrooxybutyl)piperidin-4-yl or *N*-(4-nitrooxybutyl)-1,2,3,6-tetrahydropyridin-4-yl nitric oxide donor moiety: Synthesis, biological evaluation, and nitric oxide release studies. *Bioorganic & Medicinal Chemistry Letters* 20, 2010, 1324-1329. [Pubmed ID: 20097072](#).
35. Yu, G.; Chowdhury, M. A.; Abdellatif, K.; Dong, Y.; Rao, P. N. P.; Das, D.; **Velázquez, C.**; Suresh, M. R.; Knaus, E. E. Phenylacetic acid regioisomers possessing a *N*-difluoromethyl-1,2-dihydropyrid-2-one pharmacophore: Evaluation as dual inhibitors of cyclooxygenases and 5-lipoxygenase with anti-inflammatory activity. *Bioorganic and Medicinal Chemistry Letters* 20, 2010, 896-902. [Pubmed ID: 20045320](#).
36. Chowdhury, M. A.; Abdellatif, K. R.; Dong, Y.; Das, D.; Yu, G.; **Velázquez, C.**; Suresh, M. R.; Knaus, E. "Synthesis and biological evaluation of salicylic acid and *N*-acetyl-2-carboxybenzenesulfonamide regioisomers possessing a *N*-difluoromethyl-1,2-dihydropyrid-2-one pharmacophore: dual inhibitors of cyclooxygenases and 5-lipoxygenase with anti-inflammatory activity". *Bioorganic & Medicinal Chemistry Letters* 19, 2009, 6855-6861. [Pubmed ID: 19884005](#).
37. Abdellatif, K. R.; Chowdhury, M. A.; Dong, Y.; Das, D.; Yu, G.; **Velázquez, C.**; Suresh, M.; Knaus, E. Diazen-1-ium-1,2-diols nitric oxide donor ester prodrugs of 5-(4-carboxymethylphenyl)-1-(4-methanesulfonylphenyl)-3-trifluoromethyl-1H-pyrazole and its aminosulfonyl analog: Synthesis, biological evaluation and nitric oxide release studies. *Bioorganic & Medicinal Chemistry*, 17, 2009, 5182-5188. [Pubmed ID: 19500994](#).
38. Abdellatif, K. R.; Chowdhury, M. A.; Dong, Y.; Das, D.; Yu, G.; **Velázquez, C.**; Suresh, M.; Knaus, E. Dinitroglycerol and diazen-1-ium-1,2-diols nitric oxide donor ester prodrugs of aspirin, indomethacin and ibuprofen: Synthesis, biological evaluation, and nitric oxide release studies. *Bioorganic & Medicinal Chemistry Letters*, 19, 2009, 3014-3018. [Pubmed ID: 19419861](#).

39. Abdellatif, K. R.; Chowdhury, M. A.; Dong, Y.; **Velázquez, C.**; Das D.; Suresh, M. R.; Knaus E. E. Diazen-1-ium-1,2-diolated nitric oxide donor ester prodrugs of 5-(4-hydroxymethylphenyl)-1-(4-aminosulfonylphenyl)-3-trifluoromethyl-1H-pyrazole and its methanesulfonyl analog: synthesis, biological evaluation, and nitric oxide release studies. *Bioorganic and Medicinal Chemistry*, 16, 2008, 9694-9698. [Pubmed ID: 18930406](#).
40. **Velázquez, C.**; Chen, Qiao-Hong; Citro, M.; Keefer, L.; Knaus, E. E. Second Generation NONO-NSAIDs possessing a PROLI/NO moiety: design, synthesis, biological evaluation, and nitric oxide release studies. *Journal of Medicinal Chemistry* 51, 2008, 1954-1961. [Pubmed ID: 18314945](#).
41. **Velázquez, C.**; Rao, P. N. P.; Citro, M.; Keefer, L.; Knaus, E. *O*²-Acetoxymethyl-protected diazeniumdiolate-based NSAIDs (NONO-NSAIDs): synthesis, nitric oxide release, and biological evaluation studies. *Bioorganic and Medicinal Chemistry* 15, 2007, 4767-4774. [Pubmed ID: 17509888](#).
42. **Velázquez, C.**; Rao, P. N. P.; Knaus, E. E. Novel NSAIDs possessing a nitric oxide donor diazen-1-ium-1,2-diolate moiety: design, synthesis, biological evaluation and nitric oxide release studies. *Journal of Medicinal Chemistry* 48, 2005, 4061-4067. [Pubmed ID: 15943479](#). [This paper was selected as one of the top 1000 most important papers of the year by the “Faculty of 1000 – Biology”](#).
43. Mojarrad, J.; Vo, D.; **Velázquez, C.**; Knaus, E. E. Design and synthesis of alkyl 7,7-dihalo-3-methyl-5-(nitrophenyl)-2-azabicyclo[4.1.0]hept-3-ene-4-carboxylates with calcium channel antagonist activity. *Bioorganic Medicinal Chemistry* 13, 2005, 4085-4091. [Pubmed ID: 15911322](#).
44. **Velázquez, C.**; McDonald, R.; Knaus, E. E. Synthesis and biological evaluation of 3,4-diphenyl-1,2,5-oxadiazole-2-oxides and 3,4-diphenyl-1,2,5-oxadiazoles as potential hybrid COX-2 inhibitor /nitric oxide donor agents. *Bioorganic Medicinal Chemistry* 13, 2005, 2749-2757. [Pubmed ID: 15781386](#).
45. Tri-Nguyen, J.; **Velázquez, C.**; Knaus, E. E. Hantzsch 1,4-dihydropyridines containing a diazen-1-ium-1,2-diolate nitric oxide donor moiety to study calcium channel antagonist structure-activity relationships and nitric oxide release. *Bioorganic Medicinal Chemistry* 13, 2005, 1725-1738. [Pubmed ID: 15698790](#).
46. Shang, R.; **Velázquez, C.**; Knaus, E. Synthesis, calcium channel agonist-antagonist modulation activities, and nitric oxide release studies of nitrooxyalkyl 1,4-dihydro-2,6-dimethyl-3-nitro-4-(2,1,3-benzoxadiazol-4-yl)pyridine-5-carboxylate racemates, enantiomers, and diastereomers. *Journal of Medicinal Chemistry* 47, 2004, 254-261. [Pubmed ID: 14695839](#).
47. **Velázquez, C.**; Knaus, E. Synthesis and biological evaluation of 1,4-dihydropyridine calcium channel modulators having a diazen-1-ium-1,2-diolate nitric oxide donor moiety for the potential treatment of congestive heart failure. *Bioorganic Medicinal Chemistry* 12, 2004, 3831-3840. [Pubmed ID: 15210150](#).
48. Fassihi, A.; **Velázquez, C.**; Knaus, E. Synthesis of dialkyl 1,4-Dihydro-2,6-dimethylpyridine-3,5-dicarboxylates and alkyl 1,4-dihydro-2,6-dimethyl-3-nitropyridine-5-carboxylates possessing a C-4 2,4-dioxo-1,2,3,4-tetrahydropyrimidin-5-yl (uracil) substituent to determine calcium channel modulation structure-activity relationships. *Journal of Heterocyclic Chemistry* 41, 2004, 263-266. [ISI: 000221155800018](#).
49. **Velázquez, C.**; Vo, D.; Knaus, E. Synthesis, nitric oxide release and calcium channel modulation activities of 4-aryl-1,4-dihydro-2,6-dimethyl-5-nitro-3-[*O*²-alkyl-1-(pyrrolidin-1-yl)diazen-1-ium-1,2-diolate]pyridine carboxylates. *Drug Development Research* 60, 2003, 204-216.

[XVII. Abstracts/Presentations](#)

1. Breitenbach, J. S.; Goldhahn, K.; Aldawsari, F.; Velazquez-Martinez, C. A.; Steiner, G.; Kloesch, B. Immunosuppressive, antiproliferative and pro-apoptotic effects of two novel resveratrol-salicylate hybrid molecules on jurkat T cells. Poster presentation at the EULAR 2018 Congress, Amsterdam, Netherlands from 13-16 June 2018.
2. Tabatabaei-Dakhili, S. A.; Gopal, K.; Morgan, A.; Siraki, A.; Ussher, J.; **Velazquez-Martínez, C. A.*** Novel selective FOXM1 transcriptional program suppressors. Poster presentation, Faculty of Pharmacy and Pharmaceutical Sciences Research Day, November 24th, 2016. Edmonton, AB. Canada.
3. Loredó-Calderon, E.; Cordero-Díaz, A.; Hernández-Fernández, E.; Rivas-Galindo, V.; **Velazquez-Martínez, C. A.***; Lopez-Cortina, S.* One-pot synthesis of new α -aminophosphonates under microwave irradiation. Poster presentation, Faculty of Pharmacy and Pharmaceutical Sciences Research Day, November 24th, 2016. Edmonton, AB. Canada.
4. Elshaikh, A.; **Velazquez-Martínez, C. A.*** Targeting the oncogenic FOXM1 transcription factor in cancer treatment. Poster presentation, Faculty of Pharmacy and Pharmaceutical Sciences Research Day, November 24th, 2016. Edmonton, AB. Canada.
5. **Velazquez-Martínez, C. A.*** Targeting the FOXM1 transcription factor in cancer treatment and (possibly) cancer imaging. Oral presentation, Western Canadian Medicinal Chemistry Workshop, Saskatoon, SK. Canada, September 23rd to 25th 2016.
6. Tabatabaei Dakhili, S. A.; **Velazquez-Martínez, C. A.*** Untying the knot on transcription factors druggability, poster presentation, Western Canadian Medicinal Chemistry Workshop, Saskatoon, SK. Canada, September 23rd to 25th 2016.
7. Elshaikh, A.; **Velazquez-Martínez, C. A.*** Poster presentation: "Targeting the oncogenic FOXM1 transcription factor in cancer treatment", Canadian Society for Pharmaceutical Sciences, Vancouver BC, Canada. May 30th-June 3rd 2016.
8. Katrin Goldhahn, Fahad Aldawsari, Burkhard Kloesch, Guenter Steiner, **Carlos Velazquez-Martínez**, Klaus Schmetterer. "Resveratrol and a resveratrol-salicylate hybrid molecule: a comparative study in CD4⁺ T-cells". Poster presentation at the 4th European Congress of Immunology, Vienna, Austria. September 6th to 9th 2015.
9. Salla, M.; Gordon, M.; Aldawsari, F.; **Velázquez-Martínez C. A.**; Baksh, S. Resveratrol Derivatives: Inhibitors of NF-kB Activity and Potential Therapeutics for Inflammatory Bowel Disease and Cancer. Cancer Research Institute of Northern Alberta (CRINA) research day, November 15th, 2015, Katz Building, Edmonton AB.
10. Said, A.; Fiteih, Y.; Salla, M.; Gordon, M.; Volodko, N.; Aldawsari, F.; Aguayo-Ortiz, R.; **Velázquez-Martínez C. A.**; Baksh, S. Pre-clinical Therapeutics for Inflammatory Bowel Disease (IBD) and IBD-related Colorectal Cancer (poster presentation). Cancer Research Institute of Northern Alberta (CRINA) research day, November 15th, 2015, Katz Building, Edmonton AB.
11. Aldawsari, F.; Chattopadhyay, M.; Yoo, J.; Rao, P. N. P.; Medina-Franco, J.; Kashfi, K.; **Velázquez-Martínez, C. A. (*)** Design, synthesis, and biological evaluation of resveratrol analogs as anti-inflammatory and potential chemopreventive agents. Oral presentation at the 96th Canadian Chemistry Conference & Exhibition. Quebec, QC. May 30th, 2013. [Selected for the first prize in the Biological Medicinal Student \(oral national competition\).](#)
12. Rodriguez-Dimitrescu, A.; Chattopadhyay, M.; Ravinder, K.; Kashfi, K.; **Velázquez-Martínez, C. A. (*)** Pharmacological modulation of forkhead box M1 (FoxM1) transcription factor in cancer chemoprevention and treatment Oral presentation at the 96th Canadian Chemistry Conference & Exhibition. Quebec, QC. May 30th, 2013.

13. Aldawsari, F.; Chattopadhyay, M.; Yoo, J.; Rao, P. N. P.; Medina-Franco, J.; Kashfi, K.; **Velázquez-Martínez, C. A. (*)** Design, synthesis, and biological evaluation of resveratrol analogs as anti-inflammatory and potential chemopreventive agents. Poster presentation. Cancer Research Conference 2012, Alberta Cancer Foundation. Banff, Alberta. Canada.
14. Chattopadhyay, M.; Ravinder, K.; Rodriguez-Dimitrescu, A.; **Velázquez-Martínez, C. A.**; Khasfi, K. Pharmacological modulation of the forkhead box M1 (FOXO1) transcription factor in cancer chemoprevention and treatment. Poster presentation. Cancer Research Conference 2012, Alberta Cancer Foundation. Banff, Alberta. Canada.
15. Chattopadhyay, M.; Kodela, R.; Rodriguez-Dimitrescu, A.; **Velázquez-Martínez, C. A.**; Kashfi, K. Pharmacological modulation of forkhead box M1 (FoxO1) transcription factor in cancer chemoprevention and treatment. Oral presentation at the 3rd Western Canadian Medicinal Chemistry Workshop. Saskatoon, SK. September 29th, 2012.
16. Aldawsari, F.; Chattopadhyay, M.; Kashfi, K.; Yoo, J.; Medina-Franco, J.; **Velázquez-Martínez, C. A. (*)** Design, synthesis and biological evaluation of aspirin-like resveratrol derivatives as new anti-inflammatory and potential cancer chemopreventive agents. Poster presentation at the 95th Canadian Chemistry Conference (Canadian Society of Chemistry). Calgary, AB. May 22-25th 2012.
17. Nasirullah; Ul Islam, N.; Khan, I.; Aldawsari, F.; **Velázquez-Martínez, C. A. (*)**. The carboxylic acid group present in NSAIDs is not essential to exert anti-inflammatory activity in vivo. Oral presentation at the 15th Hellenic Symposium on Medicinal Chemistry (European Federation for Medicinal Chemistry). Athens, Greece. May 25-27th 2012.
18. Nasirullah; Ul Islam, N.; Khan, I.; Bhardwaj, A.; **Velázquez-Martínez, C. A. (*)**. In vivo anti-inflammatory activity of NSAIDs without the presence of a carboxylic acid group. 3rd Spring Research Symposium, Institute of Chemical Sciences, University of Peshawar, Pakistan. March 7th, 2012.
19. Aldawsari, F.; Chattopadhyay, M.; Yoo, J.; Rao, P. N. P.; Medina-Franco, J.; Kashfi, K.; **Velázquez-Martínez, C. A. (*)** Synthesis and biological evaluation of resveratrol analogues as anti-inflammatory and potential chemopreventive agents; Faculty of Pharmacy and Pharmaceutical Sciences Research Day, Edmonton, Alberta; Canada. November 2011. [Best poster for a junior graduate student.](#)
20. Jain, S.; Tran, S.; El Gendy, M.; El-Kadi, A. O.; **Velázquez-Martínez, C. A. (*)**. Nitric oxide-release is not required to decrease the ulcerogenic profile of NSAIDs. Poster presentation at GDCh Wissenschaftsforum Chemie 2011, Bremen, Germany, September 4-7th 2011.
21. Jain, S.; El Gendy, M.; El-Kadi, A. O.; **Velázquez-Martínez, C. A. (*)**. Novel prodrugs of NSAIDs with improved anti-inflammatory activity, low ulcerogenicity with potential chemopreventive properties; do we really need a nitric oxide-releasing group? Poster presentation at the Canadian Society for Pharmaceutical Sciences National Symposium, Montreal, Canada. May 2011.
22. Aldawsari, F.; Rao, P. N. P.; **Velázquez-Martínez, C. A. (*)**. Design, synthesis, and biological evaluation of aspirin-like resveratrol derivatives as potential colon cancer chemopreventive agents. Poster presentation at the Canadian Society for Pharmaceutical Sciences National Symposium, Montreal, Canada. May 2011.
23. Jain, S.; El Gendy, M.; El-Kadi, A. O.; **Velázquez-Martínez, C. A. (*)** Novel prodrugs of NSAIDs with improved anti-inflammatory activity, low ulcerogenicity with potential chemopreventive properties; do we really need a nitric oxide-releasing group? Poster presentation at the Faculty of Pharmacy and Pharmaceutical Sciences Research Day, Edmonton, Canada. November 2010.
24. Özadali, K.; Özkanli, F.; Jain, S.; Rao, P.; **Velázquez-Martínez, C. A. (*)** Synthesis and cyclooxygenase inhibitory activities of some 1,3,4-thiadiazole and 1,2,4-triazole-5-thione derivatives

- of isoxazolo[4,5-d]pyridazin-4(5H)-ones. Poster presentation at the 4th International Meeting on Medicinal and Pharmaceutical Chemistry, Ankara, Turkey. September 2010.
25. Jain, S.; **Velázquez-Martínez, C. A. (*)** Design, synthesis, and biological evaluation of non-ulcerogenic non-steroidal anti-inflammatory prodrugs possessing polyphenols: is nitric oxide-release required? Poster presentation at the Western Canadian Medicinal Chemistry Workshop. Saskatoon, Canada. September 2010.
26. Jain, S.; **Velázquez-Martínez, C. A. (*)** Non-ulcerogenic effective non-steroidal anti-inflammatory prodrugs of aspirin, ibuprofen, and indomethacin: is nitric oxide-release required? Poster presentation at the Canadian Society for Pharmaceutical Sciences, Vancouver, Canada. June 2010.
27. Chattopadhyay, M.; **Velázquez, C.**; Keefer, L.; Kashfi, K. Comparison between NO-ASA and NONO-ASA as safe anti-inflammatory, analgesic, antipyretic, anti-oxidant, chemopreventive prodrugs. Poster presentation at the Eighth Annual AACR International Conference on Frontiers in Cancer Prevention Research, Houston, Texas. December 7th, 2009.
28. Coppo, L.; **Velázquez, C.**; Di Giuseppe, D.; Di Simplicio, P.; Priora, R. Anti-aggregating effects of a nitric oxide-releasing aspirin (CVM-01) possessing a diazeniumdiolate moiety. Poster presentation at the 13th Annual Cardiac Sciences Research Day, University of Alberta, Edmonton, Canada. June 6th, 2009.
29. **Velázquez, C.**; Saavedra, J.; Citro, M.; Knaus, E.; Keefer, L. Second generation NONO-NSAIDs possessing a PROLI/NO Moiety: design, synthesis, biological evaluation, and nitric oxide release studies. Poster presentation at the 8th CCR-NCI Annual Fellows and Young Investigators Colloquium. Ocean City, Maryland. March 3-5, 2008.
30. **Velázquez, C.**; Keefer, L. Diazeniumdiolate-based NO-NSAIDs: a new class of anti-inflammatory, analgesic, GI-safe, and (potential) chemopreventive agents. Poster presentation at the AACR, Chemistry in Cancer Research Meeting, San Diego, California, US. February 4-7, 2007.
31. **Velázquez, C.**; Saavedra, J.; Keefer, L. Novel NONO-NSAIDs possessing a nitric oxide donor diazeniumdiolate moiety. Poster presentation at the Molecular Targets Faculty Retreat, Bethesda, Maryland, US. September 27, 2006.
32. **Velázquez, C.**; Keefer, L. Diazeniumdiolate-based NO-NSAIDs: a new class of anti-inflammatory, analgesic, GI-safe, and (potential) chemopreventive agents. Poster presentation at the Cancer Prevention Think Tank Symposium, National Cancer Institute, Frederick Maryland, US. December 8, 2006.
33. **Velázquez, C.**; Rao, P.N.; Knaus, E.; Keefer, L. Novel NONO-NSAIDs possessing a nitric oxide-donor diazeniumdiolate moiety. Poster presentation at the 4th International Conference of the Nitric Oxide Society, Chemistry and Therapeutic Applications of NO, Monterey, California, US. June 25-29, 2006.
34. **Velázquez, C.**; Knaus, E. Hybrid calcium channel modulators with nitric oxide release properties as prodrugs for the potential treatment of congestive heart failure. Poster presentation at the 7th annual symposium, Canadian Society for Pharmaceutical Sciences. Vancouver, British Columbia. 9-12 June 2004.
35. **Velázquez, C.**; Knaus, E. Synthesis, calcium channel modulation effects and nitric oxide release studies of novel calcium channel modulators for the potential treatment of congestive heart failure. Poster presentation at the 7th Annual Cardiac Sciences Research Day, University of Alberta, Edmonton, Canada. June 6th, 2003.

36. **Velázquez, C.**; Morales, S.; Hernandez-Campos, A.; Castillo-Bocanegra, R. Design and synthesis of methyl N-phenylcarbamates as potential anthelmintic drugs. Poster presentation at the V Chemical Congress of North America (ACS), Cancún Quintana Roo, México. November 11-15, 1997.
37. **Velázquez, C.**; Morales, S.; Hernandez-Campos, A.; Castillo-Bocanegra, R. Methyl N-phenylcarbamates with potential anthelmintic activity. Oral presentation at the XXIX Congreso Nacional de Ciencias Farmacéuticas, Acapulco Guerrero, México. October 27-31, 1996.

XVIII. Invited speaker presentations

1. Graduate course: “*Principles of drug action and disposition*” at the State University of Maringá, Brazil. August 15th to 19th 2016.
2. Invited presentation: “Teaching the discipline of Medicinal Chemistry in the new PharmD curriculum at the University of Alberta,” Oral presentation at the XIII National Meeting of Medicinal Chemistry Professors, University of Sao Paulo, Brazil. November 25th to 27th 2015.
3. Invited presentation: “Chemical Modulation of the Forkhead Box M1 (FOXM1) Transcription Factor in Cancer Treatment and Prevention”, **Velázquez-Martínez (*)**; June 02/2014, International Symposium of Medicinal Chemistry, Vancouver BC, Canada.
4. Kodela, R.; Chattopadhyay, M.; **Velázquez-Martínez, C. A.**; Kashfi, K. Chemical modulation of the forkhead box M1 (FOXM1) transcription factor in cancer treatment and prevention. Podium presentation. Drug Discovery & Therapy World Congress. Boston, MA (USA) June 3rd, 2013.
5. Design, synthesis, and preliminary docking studies of new multi-target cancer chemopreventive polyphenols. Toxicology Research Group, University of Alberta. August 4th, 2011.
6. Design and synthesis of nitric oxide-releasing prodrugs. Tijuana Institute of Technology, Tijuana BC. Mexico. June 16th, 2006.
7. NONO-NSAIDs: the new generation of analgesic, anti-inflammatory drugs. National Cancer Institute, Frederick MD. July 6th, 2006.
8. Chromatographic Criteria for Validation in the Pharmaceutical Industry. Hewlett Packard Educational Center, México City. April 2nd, 1998.
9. Quality: Basic Concepts. Health Ministry Educational Center, México City. April 22-23rd 1998.
10. Serum Cholinesterase. National Laboratory, Health Ministry; México City. May 6th, 1998.
11. Pathogens. National Laboratory, Health Ministry; México City. May 18th, 1998.
12. Quality Manual. National Laboratory, Health Ministry; México city, México. May 29th, 1998.
13. Quality Control of Commercial Drugs (workshop). National Laboratory, Health Ministry; México City. August 3-7th 1998.
14. Epidemiological Program. National Laboratory, Health Ministry; México City. October 5th, 1998.
15. International Certification for Testing Laboratories. National Autonomous University of México, México City. October 9th, 1998.
16. Quality Control of Culture Media (workshop). National Laboratory, Health Ministry; México City. October 6-30th 1998.
17. Validation of Automated Dissolution Systems. Perkin-Elmer México, México City. November 10th 1998.

18. Standard Chemical Substances. National Laboratory, Health Ministry; México City. November 24th, 1998.
19. Calculation of Productivity. National Laboratory, Health Ministry; México City. August 6th, 1997.
20. UV/VIS Spectrophotometry. National Laboratory, Health Ministry; México City. July 11th, 1997.
21. Nomenclature of Organic Chemistry (workshop). National Laboratory, Health Ministry; México City. October 6-31st 1997.
22. Handling and Disposition of Hazardous Waste. National Laboratory, Health Ministry; México City. October 14th, 1997.
23. Verification and Calibration of Balances. National Laboratory, Health Ministry; México City. November 17-28th 1997.

XIX. Volunteer Service

- 1) President of the Mexican Global Talent Network Society. Part of the Global Network of Mexicans; affiliated with the Mexican Abroad Institute (IME) and the Foreign Affairs Ministry (SRE).
- 2) Volunteer for the Faculty of Pharmacy white coat ceremony 2010 and 2011.
- 3) Site set up volunteer. Canadian Breast Cancer Foundation, “CIBC run for the cure,” October 1st and 2nd 2011. I coordinated one group of volunteers who helped setting-up tents and general activities at Churchill Square, Edmonton.
- 4) Judge: Special Awards in Health, 2010 Edmonton Regional Science Fair, Northern Alberta Institute of Technology (NAIT), April 10th 2010 (8:00 – 13:00).
- 5) Volunteer Spanish instructor at the Edmonton Hispanic Bilingual Association, September 2009 – Current.

XX. Patents

1. Sulfur Based FOXM1 Inhibitors to Diagnose and Treat Human Cancer. United States Provisional Patent Application Serial No. 62/597,319. Inventors: Carlos Alberto Velazquez Martinez and Seyed Amirhossein Tabatabaei Dakhili.
2. Novel RIPK2 inhibitors for the treatment of inflammatory bowel disease, 62/395,691, Provisional USA Patent application. 2016.
3. WO 2006/125016 A1, “Novel NSAIDs possessing a nitric oxide donor diazen-1-ium-1,2-diolate moiety”. Technology, Entrepreneur, and Company Development (TEC) Edmonton. University of Alberta, Canada.
4. WO 2007/127725 A2, “Diazeniumdiolated Non-steroidal Anti-inflammatory Drugs, Compositions Thereof, and Related Methods.” Technology Transfer Branch; National Cancer Institute, Frederick, USA.