

## **CURRICULUM VITAE**

**Aaron Puhl, BSc, MSc, DC**

1212 3<sup>rd</sup> Avenue South  
Lethbridge, AB  
T1J 0J9  
puhlaa@gmail.com

### **EDUCATION**

---

- 2008 - 2012**      Doctor of Chiropractic (DC)  
Canadian Memorial Chiropractic College, Toronto, ON
- 2004 - 2007**      Masters of Science (MSc) Biochemistry/ Molecular Biology  
University of Lethbridge, Lethbridge, AB
- 1997 - 2001**      Bachelor of Science (BSc) Biochemistry  
University of Lethbridge, Lethbridge, AB

### **EMPLOYMENT**

---

- 2012 – Current**      Chiropractor and Clinic Owner  
Able Body Health Clinic, Lethbridge, AB
- 2009 - 2011**      Research assistant at CMCC  
Funded by CIHR student research awards
- 2007 – 2008**      Biologist (Molecular Genetics/Microbial Ecology/Enzymology)  
Agriculture and Agri-Foods Canada, Lethbridge, AB
- 2004 – 2006**      Biology Lab Instructor  
University of Lethbridge, Lethbridge, AB
- 2001– 2002**      Research Technician (Molecular Genetics)  
Agriculture and Agri-Food Canada, Lethbridge, AB

## **PROFESSIONAL ACTIVITIES / AFFILIATIONS**

- 2021 – Current** College of Chiropractors of Alberta – Modes of Care committee - Chair
- 2021 – Current** College of Chiropractors of Alberta – Competency Committee - member
- 2019 – Current** Canadian Chiropractic Research Foundation – Research Committee - member
- 2019 – Current** Canadian Chiropractic Guideline Initiative - Steering Committee - member
- 2012 – Current** College of Chiropractors of Alberta - General membership
- 2012 – Current** Chiropractic Association of Alberta – General membership
- 2012 – Current** Canadian Chiropractic Association - General membership
- 2010 – 2012** CMCC Nutrition Club - Co-Founder and Vice-President
- 2005 – 2006** Graduate Student Association, University of Lethbridge - Vice-President
- 2005 – 2006** Alberta Graduate Council - Vice-Chair
- 2005 – 2006** School of Graduate Studies, University of Lethbridge - Committee member

## **SCHOLARSHIPS, HONOURS AND AWARDS**

- 2012** Magna cum laude: Canadian Memorial Chiropractic College
- 2012** Clinic Honors: Canadian Memorial Chiropractic College
- 2011** CIHR Health Professional Student Research Award: awarded by CMCC
- 2011** Poster Award; World Federation of Chiropractic 11<sup>th</sup> Biennial Congress, Rio de Janeiro 2011
- 2010** Colin A. Greenshields Award (CMCC)
- 2010** CIHR Health Professional Student Research Award: awarded by CMCC
- 2010** Best Overall Abstract; CMCC Student Research Symposium
- 2009** CIHR Health Professional Student Research Award: awarded by CMCC
- 2009** Louise McKinney Scholarship (CMCC)
- 2009** Earl Homewood Memorial Research Award (CMCC)

## **TEACHING EXPERIENCE**

---

### **Undergraduate Lab Courses Instructed at the University of Lethbridge**

1. Course Title: Biology 1010 – Cellular Basis of Life

Semesters: Fall, 2004; Spring, 2005

Description: Laboratory component of the course compliments the lecture with an introduction to the fundamental principles and techniques used in cellular biology.

2. Course Title: Biology 2000 – Principles of Genetics

Semester: Fall, 2005

Description: Laboratory component of the course compliments the lecture with an introduction to principles of heredity, recombination, gene structure and function and molecular techniques.

## **PUBLICATIONS**

---

1. Cupler ZA, Gliedt JA, Perle SM, **Puhl AA**, Schneider MJ. (2023) Associations between demographics and clinical ideology, beliefs, and practice patterns: a secondary analysis of a survey of randomly sampled United States chiropractors. *BMC Complement Med Ther*. 9;23(1):404. doi: 10.1186/s12906-023-04225-z.
2. Hohenschurz-Schmidt D, Vase L, Scott W, Annoni M,... Pogatzki-Zahn EM, **Puhl AA**, et al. (2023) Recommendations for the development, implementation, and reporting of control interventions in efficacy and mechanistic trials of physical, psychological, and self-management therapies: the CoPPS Statement *BMJ*; 381 :e072108 doi:10.1136/bmj-2022-072108
3. Gliedt, JA, Perle, SM, **Puhl, AA**, et al. (2021) Evaluation of United States chiropractic professional subgroups: a survey of randomly sampled chiropractors. *BMC Health Serv Res* **21**, 1049. <https://doi.org/10.1186/s12913-021-07081-0>
4. **Puhl AA**, Reinhart CJ, Injeyan S, Tibbles A. (2017) Description of the case mix experienced by chiropractic students during a clinical internship. *J Chiropr Educ*;31(2):132-139.
5. **Puhl AA**, Reinhart CJ, Doan JB, Vernon H. (2017) The quality of placebos used in randomized, controlled trials of lumbar and pelvic joint thrust manipulation - a systematic review. *Spine J*;17(3):445-456.
6. Vernon H, Guerriero R, Kavanaugh S, **Puhl A**. (2015) Is "fear of passive movement" a distinctive component of the Fear-Avoidance Model in whiplash? *J Can Chiropr Assoc*;59(3):288-93.
7. **Puhl AA**, Reinhart CJ, Injeyan HS. (2015) Diagnostic and treatment methods used by chiropractors: A random sample survey of Canada's English-speaking provinces. *J Can Chiropr Assoc*;59(3):279-87.
8. **Puhl AA**, Reinhart CJ, Doan JB, McGregor M, Injeyan HS. (2014) Relationship between chiropractic teaching institutions and practice characteristics among Canadian doctors of chiropractic: a random sample survey. *J Manipulative Physiol Ther*;37(9):709-18.

9. McGregor M, **Puhl AA**, Reinhart C, Injeyan HS, Soave D. (2014) Differentiating intraprofessional attitudes toward paradigms in health care delivery among chiropractic factions: results from a randomly sampled survey. *BMC Complementary and Alternative Medicine*;10;14:51.
10. Vernon H, Guerriero R, Kavanaugh S, Soave D, **Puhl A**. (2013) Self-rated disability, fear-avoidance beliefs, nonorganic pain behaviors are important mediators of ranges of active motion in chronic whiplash patients. *Disability and Rehabilitation*;35(23):1954-60.
11. Johnson C, Rubinstein SM, Côté P, Hestbaek L, Injeyan HS, **Puhl A**, Green B, et al. (2012) Chiropractic care and public health: Answering difficult questions about safety, care through the lifespan, and community action. *Journal of Manipulative and Physiological Therapeutics*;35(7):493-513.
12. Christie WS, **Puhl AA**, Lucaciu OC (2012) Cross-frictional therapy and stretching for the treatment of palmar adhesions due to Dupuytren's contracture: A prospective case study. *Manual Therapy*;17(5):479-82.
13. **Puhl AA**, Injeyan HS. (2012) Short-term effects of manipulation to the upper thoracic spine of asymptomatic subjects on plasma concentrations of epinephrine and norepinephrine – A randomized and controlled observational study. *Journal of Manipulative and Physiological Therapeutics*;35(3):209-215.
14. Vernon H, Guerriero R, Kavanaugh S, Soave D, **Puhl A**, Reinhart, C (2011) The relationship between self-rated disability, fear-avoidance beliefs, and nonorganic signs in patients with chronic whiplash-associated disorder. *Journal of Manipulative and Physiological Therapeutics*;34(8):506-513.
15. Kinsinger, S, **Puhl, AA**, Reinhart, CJ (2011) Depressive symptoms in chiropractic students: A three-year study. *Journal of Chiropractic Education*;25(2):142-150.
16. **Puhl, AA**, Reinhart, CJ, Rok, ER and Injeyan, HS (2011) An examination of the observed placebo effect associated with the treatment of low back pain – A Systematic Review. *Pain Research and Management*;16(1):45-52.
17. **Puhl AA**, Reinhart CJ, Puhl NJ, Selinger LB and Injeyan, HS (2011) An investigation of bacterial contamination on treatment table surfaces of chiropractors in private practice and attitudes and practices concerning table disinfection. *American Journal of Infection Control*;39(1):56-63.
18. Vernon H, **Puhl AA**, Reinhart CJ (2011) Systematic review of clinical trials of cervical manipulation: control group procedures and pain outcomes. *Chiropractic & Manual Therapies*;19:3.
19. **Puhl AA**, Selinger LB, McAllister TA and Inglis GD (2009) *Actinomadura keratinilytica* sp. nov., a novel keratin-degrading actinobacterium isolated from bovine manure compost. *International Journal of Systematic and Evolutionary Microbiology*;59(4):828–834.
20. **Puhl AA**, Greiner R, Selinger LB (2008) Stereospecificity of *myo*-inositol hexakisphosphate hydrolysis by a protein tyrosine phosphatase-like inositol polyphosphatase from *Megasphaera elsdenii*. *Applied Microbiology and Biotechnology*;82(1):195-103.

21. **Puhl AA**, Greiner R, Selinger LB (2008) A protein tyrosine phosphatase-like inositol polyphosphatase from *Selenomonas ruminantium* subsp. *lactilytica* has specificity for the 5-phosphate of myo-inositol hexakisphosphate. *The International Journal of Biochemistry and Cell Biology*;40(10):2053–2064.
22. **Puhl AA**, Greiner R, Selinger LB (2008) Kinetics, substrate specificity, and stereospecificity of two new protein tyrosine phosphatase-like inositol polyphosphatases from *Selenomonas lactificex*. *Biochemistry and Cell Biology*;86(4):322-330.
23. **Puhl AA**, Gruninger RJ, Greiner R, Janzen TW, Mosimann SC, Selinger LB (2007) Kinetic and structural analysis of a bacterial protein tyrosine phosphatase-like myo-inositol polyphosphatase. *Protein Science*;16(7):1368-1378.
24. **Puhl AA**, Basu SK (2004) Role of plants in phytoremediation of heavy metals. *Journal of the Botanical Society of Bengal* (Printed in India);58:1-9.

## **POSTERS and PRESENTATIONS**

---

1. **A. Puhl**, C. Reinhart, S. Injeyan, A. Tibbles. An Analysis of the Clinical Encounters of Interns at the Canadian Memorial Chiropractic College. WFC/ACC Education Conference. Montreal, Quebec – October, 2016.
2. S. Injeyan, **A. Puhl**, C. Reinhart, N. Puhl, B. Selinger. Disinfectant usage in chiropractic practice: from school to private clinic setting. 11<sup>th</sup> Biennial Congress of the World Federation of Chiropractic. Rio de Janeiro, Brazil – April 2011.
3. **A. Puhl**, C. Reinhart, N. Puhl, B. Selinger, S. Injeyan. An investigation of bacterial contamination on treatment table surfaces of chiropractors in private practice and attitudes and practices concerning table disinfection. CMCC Student Research Symposium. Toronto, ON – March, 2010.
4. **A. Puhl**, L. Shevchuck, H. S. Injeyan. Short-Term Effects of Upper Thoracic Spinal Manipulation on Epinephrine and Norepinephrine Concentrations in Plasma - A pilot study. CMCC Student Research Symposium. Toronto, ON – March, 2010.
5. B. Selinger, R. Gruninger, **A. Puhl**, R. Grenier, and S. Mosimann. Structure, functional and evolutionary insight into a class of phytate degrading enzyme related to protein tyrosine phosphatases. 5<sup>th</sup> International Symposium on Biocatalysis and Biotechnology. Taipei, Taiwan - November, 2009.
6. **A. Puhl**, R. Greiner, S. Mosimann, B. Selinger. Diversity of inositol polyphosphate phosphatases from anaerobic bacteria isolated from the rumen. Gut Microbiome Conference. Clermont-Ferrand (France) - June, 2008.
7. J. Thibault, **A. Puhl**, R. Gruninger, S. Mosimann, B. Selinger. HopAO1 from *Pseudomonas syringae* pv. tomato DC3000 is a PTP-like inositol polyphosphatase. Canadian Society of Microbiologists Conference. Calgary, AB – June, 2008.