University of Calgary Cumming School of Medicine <u>CURRICULUM VITAE</u>

I. BIOGRAPHICAL DATA

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Clinical Assistant Professor Department of Family Medicine, Faculty of Medicine University of Calgary

II. ACADEMIC RECORD

Doctor of Medicine June, 2010 Family Medicine June, 2012 University of Calgary, Calgary, AB, Canada

- i. **Bachelor of Science**, 2000-2004, McGill University, Montreal, QC, Canada (Great Distinction, Dean's Honour List)
- ii. **PhD Student**, University of British Columbia, Vancouver, BC, Canada (Part-time, 2022-2026)
- iii. Fellow of the College of Family Physicians of Canada, 2012-present

III. AWARDS AND DISTINCTIONS

- i. UBC President's Academic Excellence Initiative PhD Award (2022-2025)
- ii. Mitacs International PhD student grant (2024-2026)
- iii. Platinum Jubilee Medal on behalf of Her Majesty Queen Elizabeth II, in recognition of Public Service, Dedication and Sacrifice to the community (nominated by Jason Kenney, Premier of Alberta, August 2022)
- iv. Linacre Quarterly Research and Education Fund Pellegrino Award (2014)
- v. Outstanding Family Physician of the Year (Department of Family Medicine, Calgary Zone, 2014)
- vi. Family Medicine Resident of the Year (Rockyview Hospital, 2010-2011)
- vii. Dr. Jo Anne Skeith Medical Elective Award (2009)
- viii. Cardinal Carter Award of Distinction (McGill, 2004)
- ix. McConnell Entrance Scholarship (McGill, 2000-2004)
- x. Pro Patria Scholarship (2000)
- xi. Golden Key Honour Society (McGill (2001)
- xii. Governor General's Academic Medal, Valedictorian (2000)

IV. ACADEMIC APPOINTMENTS

- i. 2023-present Family Medicine Physician/Clinical Assistant Professor, Westglen Medical Centre /University of Calgary (Calgary, AB)
- ii. 2022-2022 Family Medicine Physician/Clinical Lecturer, Westglen Medical Centre (Calgary, AB)
- iii. 2019-present Medical Consultant, College of Nursing, Marquette University (Milwaukee, WI)
- iv. 2013-2022 Family Medicine Physician/Clinical Lecturer, Deer Valley Medical Centre (Calgary, AB)
- v. 2012-2020 Low Risk Obstetrics/Clinical Lecturer, Rockyview Regional Hospital (Calgary, AB)

V. EDUCATIONAL ACTIVITIES

- i. Undergraduate
 - 2025 Christina Nugent, Summer Studentship, University of Calgary, Faculty of Engineering, "Comparison between two hormonal fertility monitors for avoiding pregnancy"
 - 2024-2025 Keira Paiva, Honours BSc project, Queen's University, "Hormonal differences between PCOS and regular cycles"
 - Mentor teacher, Family Medicine, The University of Calgary Course Title: Medical electives for students and residents in family medicine Course Topic: Family Medicine
 - On average 2-3 students per year for 2 weeks at a time
 - ii. Graduate (course and student supervision)
 - PhD committee member for Mary Schneider 2014-2021, Marquette University
 - iv. Postgraduate (research and clinical fellows)
 - 2021-2024 Co-teacher, Marquette University Course Title: Medical Applications Course for the Marquette Method Course Topic: Fertility education Number of Students: 30
 - Retraining for family medicine physician by the request of the College of Physicians and Surgeons of Alberta (CPSA) for 12 weeks in 2022
 - v. Continuing medical education
 - Dialectical Behaviour Therapy for Primary Care, October 7 & 21, 2021
 - Choosing Wisely: Reducing Unnecessary Testing and Treatment, October 8 & November 3, 2020
 - Technology for Patient Care, October 17 & 18 2020
 - Breast health screening and treatment, November 2019
 - Fundamentals of Fetal Health Surveillance, March 2019
 - Newborn Resuscitation Program, October 2018
 - REDUCED Trial participant, June 2018
 - Methadone for analgesia, November 2017
 - Assessment of Decision-Making Capacity Workshop (Geriatrics Update), September 2016
 - Skin Cancer Screening Education Study, September 2015

- Advances in Labour and Risk Management, March 2013
- Quarterly physician meetings 2013-2022 for nursing home updates and administrative policies

VI. ADMINISTRATIVE RESPONSIBILITIES

- i. 2022-present Medical Director, Westglen Medical Centre
- ii. 2021-2022 Co-Medical Director for two clinics Gleichen Medical Centre serving rural community and Siksika First Nation and Westglen Medical Centre in south-west Calgary.
- iii. 2012-2022 Medical Director (Nursing Home), Fr. Lacombe and Providence Care Centres (Calgary, AB)
- iv. 2012-2015 Student/Resident Coordinator for Low Risk Obstetrics rotations, Rockyview Hospital (Calgary, AB)
- v. 2007-2008 Research Associate, University of Alberta, Division of Neurology
- vi. 2004-2007 Study Coordinator, University of Alberta, Division of Neurology

VII. PROFESSIONAL ACTIVITIES

- i. College of Family Physicians of Canada
- ii. College of Physicians and Surgeons of Alberta
- Professional service
 -Guest co-editor, Special Issue of Medicina (ISSN 1648-9144), Journal The field of personalized quantitative fertility monitoring of the menstrual cycle
 -Frequently requested as peer reviewer for medical journals in my research area journal reviews

-Frequently requested for advice on ad hoc ethics committees

VIII. RESEARCH SUPPORT

- i. 2025 AbSPORU grant for data collection \$3500 CAD
- ii. 2024-2026 Mitacs International PhD student grant \$120,000 CAD
- iii. 2019-2021 Principal Investigator Quantum Natural Family Planning Pilot Funding Source: Quanovate Tech Inc. Quantitative Natural Family Planning Pilot Total Funding - \$7,000 USD
- iv. 2014 Linacre Quarterly Edmund Pellegrino Award, Total Funding \$7500 USD

IX. INVITED ADDRESSES

- i. "Refining and replicating the definition of ovulation on ultrasound" Annual ObsGyn Research Day, UBC – May 2025, Vancouver BC
- ii. "Privacy and Security in Menstrual Cycle Apps" (FACTS About Fertility Virtual Conference), October, 2024
- iii. "FemTech: Cycle Tracking Across the Lifespan" (FACTS About Fertility Virtual Conference), November 11, 2023
- iv. "Quantitative Hormonal Biomarkers of Menstrual Health in Normal and Abnormal Cycles" (Marquette Annual Summit), July 29, 2023
- v. "Perinatal Palliative Care" Annual Education Conference, CPL, Saskatoon, October 2022
- vi. "Covid-19 vaccine and the menstrual cycle" Annual Education Conference,

CMA, Denver, September 2022

- vii. "Quantitative fertility monitors to track the menstrual cycle" Marquette Annual Summit, Milwaukee, August 2022
- viii. "Return of fertility after chemotherapy" FACTS online conference, June 2022
- ix. "New technologies in fertility tracking" FACTS online conference, April 2022
- x. "Comparing qualitative and quantitative monitors for fertility tracking" Marquette Method Annual Summit, virtual, August 2021
- xi. "New technologies in fertility tracking" CFCPS, October 2020
- xii. "Progesterone changes postpartum" Marquette Method Annual Summit, Milwaukee, August 2016
- xiii. "Urinary hormones and the return of fertility postpartum" Annual Education Conference, CMA, Philadelphia, September 2015
- xiv. "The use of progesterone testing for fertility tracking" Marquette Method Annual Summit, August 2014
- xv. "Nouvelles recherches sur le retour de la fertilité durant l'allaitement" CFCPS, April 2012

X. **POSTERS**

- "Using Quantitative Urine Hormones to Prospectively Follow the Perimenopause Transition: Case Studies" - Marquette Method Annual Summit– Milawaukee WI - September, 2024 and WACH program Poster Presentation – May 2024
- ii. "Visualizing menstrual cycle variability using hormone matrix heat maps" -WACH program Poster Presentation – April 2023
- iii. "Integrating a Menstrual Cycle App with New Monitoring Technologies" British Columbia Women's Health Research Institute Digital Health Week, November 2022
- iv. "Quantitative Hormonal Biomarkers of Menstrual Health in Normal and Abnormal Cycles" - WACH program Poster Presentation – April 2023
- v. "Using a Quantitative Hormone Monitor to Track the Patterns in the Postpartum Return of Fertility" – Marquette Method Annual Summit – July 2023
- vi. "Using Quantitative Urine Hormones to Prospectively Follow the Perimenopause Transition: Case Studies" – Marquette Method Annual Summit – July 2023

XI. PUBLICATIONS

- 1. Yong PJ, Khan Z, Wahl K, **Bouchard TP**, Doyle-Baker PK, Prior JC. Menstrual Health Literacy, Equity and Research Priorities. **JOGC**. 2024 Dec;46(12).
- 2. Ecochard R, Leiva R, **Bouchard TP**, Lamsweerde AV, Pearson JT, Stanford JB, et al. The menstrual cycle is influenced by weekly and lunar rhythms. <u>Fertility and Sterility</u>. 2024
- Ecochard R, Bouchard T, Leiva R, Abdullah SH, Boehringer H. Early menstrual cycle impacts of oestrogen and progesterone on the timing of the fertile window. <u>Human</u> <u>Reproduction</u>. 2024;deae236.
- 4. **Bouchard TP**, Schweinsberg K, Smith A, Schneider M. Using Quantitative Hormone Monitoring to Identify the Postpartum Return of Fertility. <u>Medicina</u>. 2023;59(11):2008.
- 5. Bouchard T, Yong P, Doyle-Baker P. Establishing a Gold Standard for Quantitative

Menstrual Cycle Monitoring. Medicina 2023;59:1513.

- 6. Stujenske TM, Mu Q, Capotosto MP, **Bouchard TP**. Survey Analysis of Quantitative and Qualitative Menstrual Cycle Tracking Technologies. <u>Medicina</u> 2023;59:1509.
- Schneider MM, Fehring RJ, Bouchard TP. (2023) Effectiveness of a Postpartum Breastfeeding Protocol for Avoiding Pregnancy. <u>Linacre Quarterly</u> 2023 002436392311672.
- Bouchard TP. Using Quantitative Hormonal Fertility Monitors to Evaluate the Luteal Phase: Proof of Concept Case Study. <u>Medicina</u> 2023;59:140.
- Abdullah S, Bouchard T, Leiva R, Boehringer H, Iwaz J, Ecochard R. Distinct urinary progesterone metabolite profiles during the luteal phase. <u>Hormone Mol Biology Clin</u> <u>Investigation</u> 2022;epub ahead of print.
- 10. Ecochard R, Leiva R, **Bouchard T**, Boehringer H, Iwaz J, Plotton I. Descriptive analysis of the relationship between progesterone and basal body temperature across the menstrual cycle. <u>Steroids</u> 2022;178:108964.
- Bouchard, T. P., Schneider, M., Schmidt, M., & Fehring, R. J. (2022). Menstrual Cycle Parameters Are Not Significantly Different After COVID-19 Vaccination. <u>J Women's</u> <u>Health</u>. doi:10.1089/jwh.2022.0097.
- Bouchard, T. P., Fehring, R. J. & Mu, Q. Quantitative Versus Qualitative Estrogen and Luteinizing Hormone Testing for Personal Fertility Monitoring. <u>Expert Rev Mol Diagn</u> 21(12):1-12 (2021).
- 13. Mu, Q., Fehring, R. J. & **Bouchard, T**. (2020) Multisite Effectiveness Study of the Marquette Method of Natural Family Planning Program. <u>The Linacre Quarterly</u>, 44, 1–9.
- Leiva, R., McNamara-Kilian, M., Niezgoda, H., Ecochard, R. & Bouchard, T. (2019). Pilot observational prospective cohort study on the use of a novel home-based urinary pregnanediol 3-glucuronide (PDG) test to confirm ovulation when used as adjunct to fertility awareness methods (FAMs) stage 1. <u>BMJ Open</u>, 9, e028496.
- Bouchard, T. P., Fehring, R. J. & Schneider, M. (2019). Pilot Evaluation of a New Urine Progesterone Test to Confirm Ovulation in Women Using a Fertility Monitor. <u>Frontiers in</u> <u>public health</u>, 7, 305.
- Bouchard, TP, Blackwell, L., Brown, S., Fehring, R., & Parenteau-Carreau, S. (2018). Dissociation between Cervical Mucus and Urinary Hormones during the Postpartum Return of Fertility in Breastfeeding Women. <u>The Linacre Quarterly</u>, 80(5).
- Abdullah, S., Bouchard, TP, Klich, A., Leiva, R., Pyper, C., Genolini, C., et al. (2018). A Quadriparametric Model to Describe the Diversity of Waves Applied to Hormonal Data. <u>Methods of Information in Medicine</u>, 57(3), 101–110.
- Fehring, R. J., Bouchard, TP, & Meyers, M. (2018). Influence of Contraception Use on the Reproductive Health of Adolescents and Young Adults. <u>The Linacre Quarterly</u>, 18(9).
- Abdulla, S. H., Bouchard, TP, Leiva, R. A., Boyle, P., Iwaz, J., & Ecochard, R. (2018). Hormonal Predictors of Abnormal Luteal Phases in Normally Cycling Women. <u>Frontiers in</u> <u>Public Health</u>, 6, 144.
- 20. **Bouchard, TP**, Fehring, R. J., & Schneider, M. M. (2018). Achieving Pregnancy Using Primary Care Interventions to Identify the Fertile Window. *Frontiers in Medicine*, 4, 250.
- Fehring, R. J., Schneider, M., & Bouchard, TP. (2017). Effectiveness of an Online Natural Family Planning Program for Breastfeeding Women. <u>Journal of Obstetric, Gynecologic,</u> <u>and Neonatal Nursing</u>, 46(4), e129–e137.
- 22. Ecochard, R., Bouchard, TP, Leiva, R., Abdulla, S., Dupuis, O., Duterque, O., et al. (2017).

Characterization of hormonal profiles during the luteal phase in regularly menstruating women. **Fertility and Sterility**, 108(1), 175–182.

- Leiva, R. A., Bouchard, TP, Abdullah, S. H., & Ecochard, R. (2017). Urinary Luteinizing Hormone Tests: Which Concentration Threshold Best Predicts Ovulation? <u>Frontiers in</u> <u>Public Health</u>, 5, 320.
- 24. Leiva, R., Bouchard, T., Boehringer, H., Abulla, S., & Ecochard, R. (2015). Random serum progesterone threshold to confirm ovulation. <u>Steroids</u>, 101, 125–129.
- Ecochard, R., Duterque, O., Leiva, R., Bouchard, TP, & Vigil, P. (2015). Self-identification of the clinical fertile window and the ovulation period. <u>Fertility and Sterility</u>, 103(5), 1319–1325.
- 26. Ecochard R, Agnes G, Leiva R, **Bouchard, TP**, Direito A, Boehringer H. (2014). Characterization of follicle-stimulating hormone profiles in normal ovulating women. <u>Fertility and Sterility</u>, 102:237-243.
- 27. Ecochard R, Leiva R, **Bouchard, TP**, Boehringer H, Direito A, Mariani A, Fehring R. (2013) Use of urinary pregnanediol-3-glucuronide to confirm ovulation. <u>Steroids</u>, 4708.
- 28. Davidson PS, Cook SP, McGhan L, **Bouchard, TP**, Camicioli R. (2013). Source memory in normal aging and Parkinson's disease. Journal of Neuropsychology, 4673.
- 29. **Bouchard, TP**, Fehring RJ, Schneider M. (2013). Efficacy of a new postpartum transition protocol for avoiding pregnancy. Journal of the American Board of Family <u>Medicine</u>, 26:35-44.
- Surdhar I, Gee M, Bouchard, TP, Coupland N, et al. (2012) Intact limbic-prefrontal connections and reduced amygdala volumes in Parkinson's disease with mild depressive symptoms. <u>Parkinsonism Related Disorders</u>, 18:809-813.
- Genuis SJ, Bouchard TP. (2012) Combination of micronutrients for bone (COMB) study: change in bone density after micronutrient intervention for suboptimal bone health. Journal of Environmental and Public Health, 354151.
- 32. Bouchard TP, Genuis SJ. (2011) Personal fertility monitors for contraception. <u>CMAJ</u>, 183(1):73-76.
- Camicioli R, Sabino J, Gee M, Bouchard TP, Fisher N, Hanstock C, Emery D, Martin W. (2011) Ventricular dilatation and brain atrophy in patients with Parkinson's disease with incipient dementia. <u>Movement Disorders</u>, 26(8):1443-1450.
- 34. Genuis SJ, **Bouchard TP**. (2010) High-tech family planning: reproductive regulation through computerized fertility monitoring. <u>European Journal of Obstetrics and</u> <u>Gynecology</u>, 153(2):124-130.
- 35. Genuis SJ, Bouchard TP. (2010) Celiac disease presenting as autism. Journal of Child <u>Neurology</u>, 25:114-119.
- Camicioli R, Bouchard TP, Somerville MJ. (2009) Homocysteine is not associated with global motor or cognitive measures in nondemented older Parkinson's disease patients. <u>Movement Disorders</u>, 24(2):176-182.
- 37. Camicioli R, Gee M, **Bouchard T**, et al. (2009) Voxel-based morphometry reveals extranigral atrophy patterns associated with dopamine refractory cognitive and motor impairment in parkinsonism. **Parkinsonism & Related Disorders**, 15(3):187-195.
- Bouchard TP, Malykhin N, Martin W, et al. (2008) Age and dementia-associated atrophy predominates in the hippocampal head in Parkinson's disease. <u>Neurobiology of Aging</u>, 29(7):1027-1039.
- 39. Malykhin N, Bouchard TP, Camicioli R, Coupland NJ. (2008) Aging hippocampus and

amygdala. <u>NeuroReport</u>, 19(5):543-547.

- 40. Malykhin N, **Bouchard TP**, Seres P, Coupland N, Camicioli R. (2007) Three-dimensional volumetric analysis and reconstruction of amygdala and hippocampal head, body and tail. <u>Psychiatry Research: Neuroimaging</u>,155(2):155-165.
- 41. Acharya H, **Bouchard TP**, Emery D, Camicioli R. (2007) Axial signs and magnetic resonance imaging correlates in Parkinson's Disease. <u>Canadian Journal of Neurological</u> <u>Sciences</u>, 34(1):56-61.
- 42. Camicioli R, Hanstock C, **Bouchard TP**, Gee M, et al. (2007) Magnetic Resonance Spectroscopic evidence for pre-supplementary motor area neuronal dysfunction in Parkinson's disease. <u>Movement Disorders</u>, 22(3):382-386.
- 43. Camicioli R, **Bouchard TP**, Licis L. (2006) Dual-tasks and walking fast: relationship to extra-pyramidal signs in advanced Alzheimer disease. Journal of the Neurological <u>Sciences</u>, 248(1-2):205-209.