

Professor David Alexander Campbell  
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## Select Publications (students are in bold)

1. Chkrebtii, O., and Campbell, D. (2019) "Adaptive step-size selection for state-space based probabilistic differential equation solvers" *Statistics and Computing*
2. **Stojkova, B. J.** and Campbell, D., (2019) "Incremental Mixture Importance Sampling with Shotgun Optimization" *Journal of Computational and Graphical Statistics*
3. **Carleton, W.C.**, Campbell, D. and Collard, M. (2018) "Chronological uncertainty severely complicates the identification of cyclical processes in radiocarbon-dated time-series." *Palaeogeography, Palaeoclimatology, Palaeoecology*.
4. **Carleton, W. C.**, Campbell, D. and M. Collard. (2018) , "Radiocarbon dating uncertainty and the reliability of the PEWMA method of time-series analysis for research on long-term human-environment interaction" *PLoS ONE* 13(1): e0191055, doi:10.1371/journal.pone.0191055
5. **Jodie-A. Watten, T.D. Pulindu Ratnasekera**, David A. Campbell, Gail S. Anderson, (2017) "Initial investigations of spectral measurements to estimate the time within stages of *Protophormia terraenovae* (Robineau-Desvoidy) (Diptera: Calliphoridae)" *Forensic Science International*
6. **Carleton, W. C.**, Campbell, D., and Collard, M. (2017) "Increasing temperature exacerbated Classic Maya conflict over the long term" *Quaternary Science Reviews*
7. **Chkrebtii, O.**, Campbell, D., Calderhead, B., Girolami, M. (2016) "Bayesian Solution Uncertainty Quantification for Differential Equations", *Bayesian Analysis (Discussion paper with rejoinder)* 11(4) 1239-1299
8. **Golchi, S.** and Campbell, D. (2016) "Sequentially Constrained Monte Carlo", *Computational Statistics and Data Analysis* , vol. 97
9. **Lo, J.**, Campbell, D., Kennedy, C, Gobas, F. (2015) "Somatic and Gastro-Intestinal In-Vivo Biotransformation Rates of Hydrophobic Chemicals in Fish" *Environmental Toxicology and Chemistry*.
10. **Golchi, S.** Bingham, D., Chipman, H., Campbell, D. (2015) "Monotone Function Estimation for Computer Experiments" *Journal of Uncertainty Quantification*
11. **Cameron, E., Chkrebtii, O.**, Campbell, D., Bayne, E. (2015) "Trans-Dimensional Approximate Bayesian Computation for inference on models of invasive species" *Computational Statistics and Data Analysis*
12. **Carleton, W. C.**, Campbell, D., and Collard, M. (2014) "A Reassessment of the Impact of Drought Cycles on the Classic Maya." *Quaternary Science* 105 doi:10.1016/j.quascirev.2014.09.032.

## Select Research/Project Funding

National Research Council of Canada / Artificial Intelligence for Design **Period:** 2020-2022  
**Total:** \$144,000. **Project Title:** AI for simulation of Biological Systems

Next Big Question in Big Data Fund, SFU **Period:** 2019-2020 **Total:** \$25,000  
**Project Title:** Predicting Escalation to Violence using Social Media Posting of an Active Hate Group.

Department of Fisheries and Ocean - Freshwater Science Contribution Program **Period:** 2019-2022  
**Total:** \$620,000 **Project Title:** Developing a real-time forecasting system for southern resident killer whales **Involvement:** Co- Investigator

NSERC Discovery **Period:** 2019-2024 **Annual:** \$36,000  
**Project Title:** Uncertainty in Statistical Computing

MITACS Cluster **Period:** 2017-2020 **Total:** \$1,693,332  
**Project Title:** E-Community Health and Toxicity. **Involvement:** Co-Investigator

MITACS Accelerate **Period:** 2017 **Total:** \$15,000  
**Project Title:** Webpage Customer Persona Discovery and Push Notification Guidelines

NSERC Engage **Period:** 2017 **Total:** \$25,000  
**Project Title:** Statistical Models for Irregularly Sized Objects

MITACS Engage Post-Doc funding Grant **Period:** 2016-2017 **Total:** \$55,000  
**Project Title:** Statistical and Physiological Beat Modelling of Seismocardiogram Signal

CANSSI **Period:** 2014-2017 **Total:** \$200,000  
**Project Title:** Advancements to State-Space Models **Involvement:** Co-Investigator

MITACS Accelerate **Period:** 2015 **Total:** \$15,000  
**Project Title:** Modeling User Behaviour Over Time from Chat Messages

## Supervision of HQP

2020-2022	Roy Wang, Post-Doc
2020	Christopher Wang, BSc
2020	Korede Adegboye, BSc
2019	Josh Kim, BSc
2018-2020	André Lukas Schorlemmer, Post-Doc
2018-2020	Gabe Phelan, MSc
2018 -	Lucas Wu, PhD
2017 -	Maude Lachaine-Loiselle, MSc
2017-	Shaun McDonald, PhD
2016-2017	Farzad Khosrow-Khavar, Post-Doc
2015-2019	Jennifer Parkhouse, MSc
2015-2017	Haoxuan Zhou, MSc
2012-2017	Biljana Jonoska Stojkova , PhD
2011-2017	Chris Carleton, PhD,(co-supervised)
2010-2018	Lo, Justin, PhD (co-supervised)