

# Daemon Cline, M.Sc.

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UBC Dept of Cellular & Physiological Sciences  
Vancouver BC V6T 1Z3  
Canada

## Education

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<b>Doctor of Philosophy in Cellular and Developmental Biology</b>	<b>In progress</b>
Thesis: Leptin and insulin resistance in appetite regulating POMC neurons	
Supervisor: Dr Mark Cembrowski, University of British Columbia	
<b>Master of Science (Distinction) in Biochemistry</b>	<b>May 2020</b>
Thesis: Role of pituitary adenylate cyclase- activating polypeptide in energy expenditure including the thermogenic response	
Supervisor: Dr Sarah Gray, University of Northern British Columbia	
<b>Bachelor of Science (Honours) in Biochemistry and Molecular Biology</b>	<b>May 2016</b>
Thesis: Phylogenetic classification of unknown Plecopteran specimens using DNA barcoding	
Supervisor: Dr Daniel Erasmus, University of Northern British Columbia	

## Selected Publications

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- Bhela, A.P.S., Leghari, P., Zhang, A., and **Cline, D.L. [corresponding] (2023)** Leptin and estrogen signaling crosstalk in the brain modulates energy metabolism. *CJUR* 7 (3): 21-26.
- Pereira, S., **Cline, D.L.**, Chan, M., et al. (2021) Role of myeloid cell leptin signaling in the regulation of glucose metabolism. *Scientific Reports*, 11 (1): 18394.
- Pereira, S., **Cline, D.L.**, Glavas, M.M., Covey, S.D. & Kieffer, T.J. (2021) Tissue specific effects of leptin on glucose and lipid metabolism. *Endocrine Reviews* 42 (1): 1-28.
- McMillan, T.R., Forster, M.A.M., Short, L.I., Rudecki, A.P., **Cline, D.L.** & Gray, S.L. (2021) Melanotan II, a melanocortin agonist, partially rescues the impaired thermogenic capacity of pituitary adenylate cyclase-activating polypeptide deficient mice *Experimental Physiology* 106 (2), 427-437.
- Cline, D.L.**, Short, L.I., Forster, M.A.M. & Gray, S.L. (2019) Adipose tissue expression of PACAP, VIP, and their receptors in response to cold stress. *Journal of Molecular Neuroscience* 68: 427-438.
- Gray, S.L. and **Cline, D.L.** (2019) PACAP: regulator of the stress response. G. Fink (Ed.). Handbook of Stress Volume 3: STRESS PHYSIOLOGY, BIOCHEMISTRY, AND PATHOLOGY. San Diego: Elsevier.

## Teaching Experience

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<b>Teaching Assistant BIOL210: Genetics (UNBC)</b>	<b>Sept- Dec 2018</b>
Two tutorial sections: develop and deliver tutorial lecture, assist student learning	
Hold office hours, mark, and ensure course consistency	
<b>Teaching Assistant BIOL123: Introductory Biology Laboratory (UNBC)</b>	<b>Sept- Dec 2015</b>
Two lab sections: Set up and run labs safely and encourage best lab practices	
Aid students in establishing skills to become confident members of the lab	

## Academic Work Experience

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<b>Karolinska Institute (Stockholm) Research Assistant in the Kirsty Spalding Lab</b>	<b>Apr- Sept 2020</b>
Human tissue sample preparation and primary tissue culture Pharmacological screening and FACS of human mature adipocytes	
<b>UNBC Research Assistant in the Sarah Gray Lab</b>	<b>Feb 2016- Sept 2017</b>
Mouse surgery, primary cell culture, RT-qPCR, fluorescence microscopy Purchasing, ordering, lab maintenance, and performing original research	
<b>UNBC Research Assistant: Biodiversity Monitoring and Assessment Program</b>	<b>Apr- Aug 2015</b>
Remote field work for eDNA and macroinvertebrate collection Taxonomy and genetic analysis using NCBI, MEGA6, then technical report writing	

## Conference Presentations

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<b>PACAP does not directly regulate lipolysis in adipocytes</b>	<b>May 2019</b>
Conference: SRP Diabetes-EndoMet Retreat   Vår Gård, Sweden	
<b>A peripheral role for PACAP in adipocyte function</b>	<b>Sept 2018</b>
Conference: BC Diabetes Research Network Day   UBCO, Kelowna, Canada	
<b>Roles of PACAP, VIP, and their receptors in cold stress</b>	<b>Dec 2017</b>
13th International Symposium on PACAP, VIP, and Related Peptides University of Hong Kong (HKU), Pok Fu Lam, Hong Kong	
<b>Hormonal control of energy metabolism in brown adipose tissue, a potential therapeutic target in obesity</b>	<b>Nov 2016</b>
IDC Research Days Conference   Civic Centre, Prince George, BC, Canada	
<b>DNA Barcoding of Skwala stoneflies reveals potential new species</b>	<b>Aug 2015</b>
6th International Barcode of Life Conference   University of Guelph, Guelph, ON, Canada	
<b>Phylogenetics of Skwala specimens using DNA Barcoding</b>	<b>Apr 2015</b>
University of Northern BC Undergrad Thesis Day   UNBC, Prince George, BC, Canada	

## Research Awards and Scholarships

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UBC Four Year Fellowship	18,500/yr	Sept 2020
NSERC Canada Graduate Scholarship - Doctoral	105,000	Sept 2020
NSERC Foreign Study Supplement	6,000	Jan 2019
NSERC Canada Graduate Scholarship - Masters	17,500	Sept 2018
UNBC Research Project Award	\$4,500	Jan 2018
UNBC Grad Conference Travel Award	\$2,000	Dec 2017
NSERC Undergraduate Student Research Award	\$4,500	May 2016
UNBC Undergrad Conference Travel Award	\$1,100	Aug 2015
UNBC In-Course Bursary	\$1,200	Oct 2014
UNBC In-Course Award	\$1,800	Oct 2012
UNBC Raven Scholarship	\$6,600	Oct 2011
District/Authority Scholarship	\$1,250	Oct 2011

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## Volunteer Work

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<b>Judge and Mentor for various Science Fairs</b> GVSF 2020-2023, CWSF 2022, YIS Canada 2021, and CISE 2015-2019 Engage and encourage students while evaluating scientific merit of projects	<b>2015-present</b>
<b>Reviewer: Canadian Journal of Undergraduate Research</b> Provide writing and research advice to prospective undergraduate authors Maintain the quality, integrity, and consistency of CJUR	<b>2020-present</b>
<b>Supervisor: Undergraduate Research Experience Program</b> Guide undergraduate students through their first research experience, build critical thinking skills, and publish in a peer-reviewed journal	<b>Sept 2020-2023</b>
<b>Conference Volunteer: UBC Multidisciplinary Undergraduate Research Conference</b> Room Host: introduce scientific program and presenters for oral sessions Workshop Host: Promote live discussion with interviewee and moderate questions	<b>Mar 2021</b>
<b>UBC Mentor (2): SUSxGSS Mentor and Faculty of Medicine (FoM) Peer Mentor</b> SUSxGSS: Provide academic advice and support to undergraduate students FoM: Support new grad students and facilitate career development activities	<b>2020-2021</b>
<b>Conference Volunteer: UBC Vancouver Diabetes Research Day</b> Main Session Host: Introduce scientific program and presenters Moderate questions and ensure smooth delivery of our program for over 400 participants Planning Committee: Coordinate logistics and scientific programming for the event	<b>Nov 2020</b>
<b>UNBC Sustainability and Equity Volunteer (various positions)</b> Borrow A Mug (BAM): Collect, wash, and return reusable mugs to campus cafes Students for a Green University: Greenhouse Supervisor, Volunteer Coordinator PGPIRG: Executive Committee member and Greenhouse Committee Chair Compost collection program: Collect, wash, and return bins to food facilities	<b>2013-2019</b>

## Academic References

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### **Dr. Mark Cembrowski**

PhD Supervisor, UBC Investigator, Centre for Brain Health  
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### **Dr. Sarah Gray**

MSc supervisor; Assistant Dean Northern Medical Program, and UBC/UNBC Faculty  
(250) 960-5442  
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### **Dr. Daniel Erasmus**

BSc supervisor, laboratory prep work supervisor, and Senior Lab Instructor at UNBC.  
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