## **CURRICULUM VITAE**

A. NAME	Lucas James Stephen Greville
<b>B. HOME ADDRESS</b>	Available upon request
C. BUSINESS ADDRESS	Department of Biology University of Waterloo 200 University Avenue West Waterloo, ON N2L 3G1 CANADA Phone: (519) 888-4567, ext 32569 Email: lucas.greville@uwaterloo.ca

# D. CITIZENSHIP

Canadian

#### E. ACADEMIC BACKGROUND

Degree	Discipline	Institution (Location)	Department	Year
Postdoc	Energetics and Metabolism	University of Waterloo (ON, Canada)	Biology	2021-
Ph.D.	Reproductive Endocrine & Behaviour	McMaster University (ON, Canada)	Psychology	2016-21
M.Sc.	Behavioural Physiology	McMaster University (ON, Canada)	Psychology	2014-16
B.Sc.	Biology & Psychology (hons)	McMaster University (ON, Canada)	Biology/Psychology	2010-14

*i)* Postdoctoral Researcher: "Flight energetics of insectivorous bats" Supervisor: Dr. Liam McGuire

- ii) Ph.D. Thesis: "Examining the pheromonal potential of estradiol in the big brown bat" Supervisor: Dr. Paul Faure Nominated for a Governor General Award
- *iii)* M.Sc. Thesis: "Steroid transfer among cohabitating female big brown bats" Supervisor: Dr. Paul Faure and Dr. Denys deCatanzaro
- *iv)* B.Sc. Honours Thesis: "<sup>3</sup>H-Estradiol transfer from male big brown bats to cohabitating females" Supervisor: Dr. Paul Faure and Dr. Denys deCatanzaro

# F. PUBLICATIONS

- **12.** Sullivan I, Adams D, **Greville LJS**, Faure PA, Wilkinson GS. (Under Review) Hibernation slows epigenetic aging in big brown bats. *Proceedings of the Royal Society of London B: Biological Sciences, Under Review, Manuscript #RSPB-2021-2567.*
- 11. Alonge MM, Greville LJS, Faure PA, Bentley GE. (In Press) Immunoreactive distribution of gonadotropin-inhibitory hormone precursor, RFRP, in a temperate bat species (*Eptesicus fuscus*). Journal of Comparative Neurology. doi:10.1002/cne.25291
- **10. Greville LJS**, Bueno LM, Pollock T, Faure PA. (2022) Quantification urinary sex steroids in the big brown bat (*Eptesicus fuscus*). *Physiological and Biochemical Zoology*, 95(1), 22–34. [Journal Cover]
- **9.** Greville LJS, Tam AG, Faure PA (2021) Evaluating odour and urinary sex preferences in the big brown bat (*Eptesicus fuscus*). *Canadian Journal of Zoology*, *99*(*10*), 930–938.

- 8. Wilkinson GS, Adams DM, Haghani A, Lu AT, Zoller J, Breeze CE, Arnold BD, Ball HC, Carter G, Cooper LN, Dechmann DKN, Deanna P, Fasel NJ, Galazyuk AV, Günther L, Hurme E, Jones G, Knörnschild M, Lattenkamp EZ, Li CZ, Mayer F, Reinhardt JA, Medellin RA, Nagy M, Pope B, Power ML, Ransome RD, Teeling EC, Vernes SC, Zamora-Mejías D, Zhang J, Faure PA, Greville LJ, Hererra M LG, Flores-Martínez JJ, Horvath S (2021) DNA methylation predicts age and provides insight into exceptional longevity of bats. *Nature Communications, 12*, 1–13.
- 7. Mondal T, Muddaluru V, Jaafar A, Gupta S, Greville LJ, Gorter JW (2020) Transfer of Adolescents with Congenital Heart Disease from Pediatric to Adult Congenital Cardiac Care: Lessons from a Retrospective Cohort Study. *Journal of Transition Medicine*, 2(1), Open-Issue.
- 6. Greville LJ, Pollock T, Faure PA, deCatanzaro D (2020) Seasonal transfer and quantification of urinary estradiol in the big brown bat (*Eptesicus fuscus*). *General and Comparative Endocrinology*, 286, 113321.
- **5.** Pollock T, **Greville LJ**, Weaver R, Radenovic M, deCatanzaro D (2019) Bisphenol S modulates concentrations of bisphenol A and oestradiol in female and male mice. *Xenobiotica*, 49(5), 540–548.
- **4. Greville LJ**, Ceballos-Vasquez A, Valdizón-Rodríguez R, Caldwell JR, Faure PA (2018) Wound healing in wing membranes of the Egyptian fruit bat (*Rousettus aegyptiacus*) and the big brown bat (*Eptesicus fuscus*). *Journal of Mammalogy*, 99(4), 974–982.
- **3. Greville LJ**, Pollock T, Salter JC, Faure PA, deCatanzaro D (2017) Progesterone transfer among cohabitating female big brown bats (*Eptesicus fuscus*). *General and Comparative Endocrinology*, 247, 199–204.
- Pollock T, Greville LJ, Tang B, deCatanzaro D (2016) Triclosan elevates estradiol levels in serum and tissues of cycling and peri-implantation female mice. *Reproductive Toxicology*, 65, 394–401.
- deCatanzaro D, Pollock T, Greville LJ, Faure PA (2014) Estradiol transfer from male big brown bats (*Eptesicus fuscus*) to the reproductive and brain tissues of cohabiting females, and its action as a pheromone. *General and Comparative Endocrinology*, 208, 126–133.

#### G. SELECTED PRESENTATIONS

\*I have given 23 presentations at local, provincial, and international conferences; and have been a contributing author on an additional 9.

- **Greville LJ**, Bueno LM, Pollock T, Faure PA (2021) Age, Sex, and Seasonal Comparisons of Urinary Estradiol in the Big Brown Bat. 6<sup>th</sup> Biennial North American Society for Comparative Endocrinology, Virtual Conference. (Talk).
- **Greville LJ**, Bueno LM, Pollock T, Faure PA (2021) Quantification Urinary Sex Steroids in the Big Brown Bat (*Eptesicus fuscus*). Society of Integrative and Comparative Biology, Virtual Conference. (Talk).
- **Greville LJ**, Pollock T, deCatanzaro D, Faure PA (2020) Seasonal Variation in Estradiol Transfer Among Male and Female Big Brown Bats. 2020 Annual Conference of the Animal Behaviour Society, Virtual Conference. (Talk).
- **Greville LJ**, Pollock T, deCatanzaro D, Faure PA (2020) Seasonal Variation in Estradiol Transfer Among Male and Female Big Brown Bats. Society of Integrative and Comparative Biology, Austin, Texas, USA. (Talk).
- **Greville LJ**, Pollock T, Faure PA, deCatanzaro D (2019) Seasonal Variation in Male Urinary Estradiol and Transfer to Female Conspecifics in *E. fuscus*. 49<sup>th</sup> North American Symposium on Bat Research, Kalamazoo, Michigan, USA. (Talk).
- Greville LJ, Pollock T, Faure PA, deCatanzaro D (2019) Seasonal Variation in Estradiol Transfer Among Male and Female Big Brown Bats. 5<sup>th</sup> Biennial North American Society for Comparative Endocrinology Meeting, Gainesville, Florida, USA. (Poster).

- **Greville LJ**, Pollock T, Faure PA, deCatanzaro D (2019) Seasonal Variation in Estradiol Transfer Among Male and Female Big Brown Bats. 49<sup>th</sup> Ontario Ecology, Ethology, and Evolution Colloquium, Hamilton, Ontario, Canada. (Talk).
- **Greville LJ**, Pollock T, deCatanzaro D, Faure PA (2018) Quantifying Unconjugated Urinary Steroids in the Big Brown Bat Across the Reproductive Cycle. 9<sup>th</sup> International Congress of Neuroendocrinology, Toronto, Ontario, Canada. (Poster).
- **Greville LJ**, Pollock T, Salter JC, deCatanzaro D, Faure PA (2017) Quantifying Steroid Transfer and Urinary Steroids in Female Big Brown Bats. 47<sup>th</sup> North American Symposium on Bat Research, Knoxville, Tennessee, USA. (Talk).
- Greville LJ, Salter JC, Pollock T., deCatanzaro D, Faure PA (2017) Progesterone Transfer Amongst Cohabitating Big Brown Bats (*Eptesicus fuscus*). 54<sup>th</sup> Annual Conference of the Animal Behaviour Society, Scarborough Ontario, Canada. (Poster).
- **Greville LJ**, Pollock T, deCatanzaro D, Faure PA (2015) Estradiol Transfer from Male to Female and Between Female Conspecifics in Big Brown Bats. 45<sup>th</sup> North American Society for Bat Research, Monterey, California, USA. (Talk).
- **Greville LJ**, Pollock T, deCatanzaro D, Faure PA (2014) <sup>3</sup>H-Estradiol Transfer from Male Big Brown Bats to Cohabitating Females. 44<sup>th</sup> meeting of the North American Society for Bat Research, Albany, New York, USA. (Talk).

#### **H. Invited Talks**

**Greville, L.J.** (2020) Examining the Pheromonal Potential of Estradiol in the Big Brown Bat. McMaster University Department of Psychology, Neuroscience & Behaviour Colloquium Seminar Series, Hamilton, Ontario, Canada.

#### I. COURSES TAUGHT

i) Sessional Instructor

Year	Course #	Course Title	Institution	Teaching Evaluation
2021	Psych 3M03	Motivation and Emotion	McMaster University	9/10 median, 8.8/10 mean
2020	LifeSci 4X03	The BioPsychology of Sex	McMaster University	10/10 median, 9.7/10 mean
2020	Psych 3M03	Motivation & Emotion	McMaster University	10/10 median, 9.2/10 mean
2020	Explore 3IE1	Bat Ecology & Human Interaction	McMaster University	10/10 median, 9.8/10 mean
2018	Psych 3M03	Motivation & Emotion	McMaster University	9.5/10 median, 9/10 mean

ii) Guest Lectures

*All guest lectures occurred at	t McMaster University
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Year	Course #	Course Title	Lecture Topic	Instructor
2021	PNB 2XF3	Fundamentals in PNB	Beards, Bats, & Hockey: My	Dr. Sukh Obhi
			Journey Through Academia	
2019	Bio 3ZZ3	Topics in Physiology	Evaluating the Pheromonal	Dr. Dennis Kolosov
			Potential of Estradiol in the Big	
			Brown Bat	
2019	PNB 2XF3	Fundamentals in PNB	Beards, Bats, & Hockey: My	Dr. Sukh Obhi
			Journey Through Academia	
2018	PNB 4J03	Inquiry in PNB	Paper Discussion; Graduate School	Dr. Paul Faure
			and Academia Discussion	
2018	LifeSci 2D03	Behavioural Processes	Why You Should Care About Bats	Dr. Ayesha Khan

2018	LifeSci 2D03	Behavioural Processes	Hormone Transfer and Urinary Steroids in Bats	Dr. Ayesha Khan
2017	LifeSci 2D03	Behavioural Processes	Why You Should Care About Bats	Dr. Ayesha Khan
2017	LifeSci 3C03	Behavioural and Evolutionary	Bats: Myths, Science, and Why You	Dr. Ayesha Khan
		Ecology	Should Care	
2017	Psych 3T03	Behavioural Ecology	Research Talk: Estradiol Transfer in	Dr. Sigal Balshine
			the Big Brown Bat	
2016	Psych 3F03	Human Evolution & Behaviour	Human Estrus	Dr. David Feinberg
2015	Psych 3M03	Motivation and Emotion	Hormones and Neurotransmitters	Dr. Denys deCatanzaro
2014	Psych 3M03	Motivation and Emotion	Conflicts Among Motives	Dr. Tyler Pollock

iii) Teaching Assistantships

*All teaching	assistantships	occurred a	at McMaster	University

Year	Course #	Course Title	Instructor
2020	Psych 2GG3	Learning, Measuring, & Shaping	Dr. Ayesha Khan
		Behaviour	
2019	LifeSci 3E03	Reproductive Endocrinology	Dr. Ayesha Khan
2018, 2019	PNB 4J03	Inquiry in PNB	Dr. Paul Faure
2017	PNB 2XF3	Fundamentals in PNB	Dr. Suzanna Becker
2017	Psych 3T03	Behavioural Ecology	Dr. Sigal Balshine
2016	Psych 3F03	Human Evolution & Behaviour	Dr. David Feinberg
2016	Psych 3H03	Arts & The Brain	Dr. Steven Brown
2015	Psych 4BN3	Cognitive Neuroscience II	Dr. Suzanna Becker
2014, 2015	Psych 3M03	Motivation & Emotion	Dr. Denys deCatanzaro, Dr. Tyler Pollock
2012-2014	Kin 1Y03/1YY3	Anatomy and Physiology I & II	Dr. Maureen MacDonald, Dr. Krista Howarth

## J. STUDENT MENTORSHIP

\*Collaboratively trained >25 new lab personnel with peers in animal care and laboratory techniques. Below are individuals I spent extended time assisting with their projects.

Year	Name	Position	Project	Post Lab
2018-2019	Audrey Tam	Undergraduate Thesis	Olfactory Sex Preferences in the Big Brown Bat	D.V.M.
			(Eptesicus fuscus)	
2017-2018	Julianna Charles	Undergraduate Thesis	The Effects of Experimenter Handling on Wound	M.HI.
			Healing in the Big Brown Bat	
2016-2017	Larissa Bueno	Brazilian PhD Travel	Investigating Sex Hormones in E. fuscus	Post-Doc
		Award		
2015-2016	Joseph Salter	Undergraduate Thesis	Progesterone Transfer Between Cohabitating	M.PH.
			Female Big Brown Bats	
2015-2016	Adam Alic	Undergraduate Thesis	Wound Healing in Wing Tissues With and Without	Ph.D.
			Visible Blood Vessels in the Big Brown Bat	
2014-2015	Marley Russell	Undergraduate Thesis	Healing Times of Single and Double Equal-Area	Ph.D.
			Wounds in the Big Brown Bat	

# **K. HONOURS**

i) Research Awards

2021	Runner-Up Best Student Talk; 6th Biennial North American Society for Comparative Endocrinology Meeting
2019	Globalink Research Award, Mitacs Canada; \$6,000 CAD
2019	Louis Guillette Jr. Graduate Travel Award, North American Society of Comparative Endocrinology; \$750 USD
2019	Outstanding Symposium Presentation, McMaster Psychology Graduate Research Day
2018	McMaster Graduate Student Association Travel Award; \$500 CAD
2018	Outstanding Poster Presentation, McMaster Psychology Graduate Research Day
2017	Outstanding Poster Presentation, 45th Southern Ontario Reproductive Biology Conference
2017-2020	NSERC Post Graduate Scholarship- Doctoral (PGS-D); \$63,000 CAD
2016-2017	Ontario Graduate Scholarship-PhD 1 (Margo Wilson & Martin Daly Graduate Scholarship); \$15,000 CAD
2015-2016	NSERC Canadian Graduate Scholarship- Master's (CGS-M); \$17,500 CAD
2014-2015	Ontario Graduate Scholarship-MSc (The Ashbaugh Graduate Scholarships); \$15,000 CAD
2014	Meducator Best Poster Award, McMaster Undergraduate NeuroXchange Conference

ii) Academic Awards

2013-2014	The University (Senate) Scholarship; \$800 CAD
2013	Member of McMaster Golden Key
2010-2014	Deans' Honour Roll, McMaster University
2010-2014	Campbell Company of Canada University Scholarship; \$8,000 CAD
2010	The McMaster Honour Award, Level 3; \$1,000 CAD
2010	Lucy Connolly Endowment in the Sciences Scholarship; \$1,500 CAD

iii) Leadership Recognitions

2019	Nominated- Mary Keyes Award for Outstanding Leadership and Service to McMaster, McMaster
2019	Nominated- Theresa Quigley Award of Excellence for Graduate Student Leadership in Athletics, McMaster

# L. SCHOLARLY AND PROFESSIONAL ACTIVITIES

i) Ad hoc external journal reviewer for:
Journal of Mammalogy
Mastazoología Neotropical
PeerJ
Canadian Wildlife Biology & Management

# M. ADMINISTRATIVE RESPONSIBILITIES

# *i) Department* 2018-2019 McMaster PNB Graduate Student Representative 2018-2020 McMaster PNB Colloquium Committee Graduate Co-Chair 2016-2017 McMaster PNB Chair Selection Committee 2015-2016 McMaster PNB First Year Graduate Representative *ii) Faculty* 2018-2020 McMaster Science Graduate Student Association (SciGSA)- PNB Rep 2016-2018 McMaster Faculty of Science Graduate Curriculum, Policy, Admissions and Study Committee- Grad Rep

iii) University2018-2020 McMaster University Graduate Council- PhD Representative

# 2019-2020 McMaster University Graduate Council Working Group- Graduate Student/Supervisor Relations

Date	Location	Talk Title	Details
April 2021	McMaster University, Alumni	Nature Talk: Welcome to the	April break talk series for
	Office	Bat Cave	elementary school children during
			the pandemic
Sept 2017	Hamilton Royal Botanical	Batty for Bats – Kids (Day)	In conjunction with Dr. Brock
	Gardens		Fenton & Dr. Roberto Valdizón-
			Rodríguez
Sept 2017	Hamilton Royal Botanical	Batty for Bats – Adults (Night)	In conjunction with Dr. Brock
	Gardens		Fenton & Dr. Roberto Valdizón-
			Rodríguez

## N. PUBLIC OUTREACH AND TALKS

# **O. EXTRACURRICULAR INVOLVEMENT**

i) Scientific

2015-Present	Volunteering with Myotistar Bat Research
2015-2019	McMaster PNB Thesis Poster Judge
2015-2018	McMaster NeuroXchange Conference Panelist/Poster Judge

ii) University and Department

2016-2020	Captain of Department Volleyball Team
2015-2020	Captain/Member of Department Softball Team
2016	Member of Department Ultimate Frisbee Team
2015-2016	McMaster PNB Social Coordinator
2013-2014	McMaster BioPsych Society 4th Year Representative
2010-2014	McMaster Marching Band
2011-2013	McMaster Welcome Week Residence Representative
2011	Hospital for Sick Children- Child Life Volunteer