
CURRICULUM VITAE – Allyson K. Menzies

D.O.B – September 9, 1988 (Manitoba, Canada)

Citizenship: Canadian

Declared Status: Métis

Institutional Address:

Department of Natural Resource Sciences
McGill University, MacDonald Campus
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EDUCATION

- Current **Ph.D. – Renewable Resources (CREATE Environmental Innovation Program)**
Department of Natural Resource Sciences, McGill University – Macdonald Campus, Ste-Anne-de-Bellevue, QC, Canada
Thesis: Biologging Bioenergetics of the Boreal Forest (Supervisor: M. Humphries)
- 2014 **Higher Education Teaching Certificate**
Professional, Applied and Continuing Education (PACE), University of Winnipeg, Winnipeg, MB, Canada
- 2014 **M.Sc. - Bioscience, Technology and Public Policy (GPA: 4.44/4.50)**
Department of Biology, University of Winnipeg, Winnipeg, MB, Canada
*Medal for Graduate Student of Highest Distinction
Thesis: Hibernation Energetics of Big Brown Bats (Supervisors: C. Willis & J. Franck)
- 2011 **B.Sc. Honours – Biopsychology (GPA: 4.34/4.50)**
Department of Biology, University of Winnipeg, Winnipeg, MB, Canada
*Gold Medal for Achievement in an Honour's Course
Thesis: Does Personality Correlate with Energetics in the Little Brown Bat (Supervisor: C. Willis)
- 2006 **French Immersion High School Diploma**
Neelin High School, Brandon, Manitoba, Canada
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PEER-REVIEWED PUBLICATIONS

In Review:

- (11) Jung, T., Konkolics, S., Kukka, P., Majchrzak, Y., **Menzies, A.**, Oakley, M., Peers, M., and E. Studd. Short-term effect of helicopter-based capture on movements of a social ungulate. **Journal of Wildlife Management**. JWM-18-0129. *all authors contributed equally and are listed in alphabetical order
- (10) Muise, K.A., **Menzies, A.K.**, and Craig, K.R. Willis. Stress-induced changes in body temperature of silver-haired bats (*Lasionycteris noctivagans*). Submitted to **Physiology and Behavior**.

Published:

- (9) Humphries, M.M., Studd, E.K., **Menzies, A.K.**, and Boutin, S. (2017). To everything there is a season: summer-to-winter food webs and the functional traits of keystone species. **Integrative and Comparative Biology**. doi:10.1093/icb/ix119. *cover article
- (8) Bohn, S., Webber, Q., Florko, K., Paslawski, K., Peterson, A., Piche, J., **Menzies, A.K.**, and C. Willis. (2017) Personality predicts ectoparasite abundance in an asocial sciurid. **Ethology** 123(10): 761-771.
- (7) Levesque, D.L., **Menzies, A.K.**, Landry-Cuerrier, M., Larocque, G., and M.M. Humphries. (2017) Embracing heterothermic diversity: non-stationary waveform analysis of temperature variation in endotherms. **Journal of Comparative Physiology B**, 1-9.
- (6) **Menzies A.K.**, Webber, Q.R.M, Baloun, D.E., McGuire, L.P., Muise, K.A., Cote, D., Tinkler, S., and C.K.R. Willis. (2016) Metabolic rate, colony size and latitude, but not phylogeny, affect rewarming rates of bats. **Physiology and Behavior**, 164: 361 – 368.
- (5) **Menzies, A.K.**, Timonin, M.E., McGuire, L.P. and Willis, C.K.R. 2013. Personality variation in little brown bats. **PLoS one**, 8(11).
- (4) Clare, E., Symondson, W., Broders, H., Fabianed, F., Frazer, E., MacKenzie, A., Boughen, A., Hamilton, R., Willis, C., Martinez-Nunez, F., **Menzies, A.K.**, Norquay, K., Brigham, M., Poissant, J., Rintoul, J., Barclay, R., and Reimer, J. 2013. The diet of *Myotis lucifugus* across Canada: assessing foraging quality and diet variability. **Molecular Ecology**, doi: 10.1111/mec.12542.
- (3) Willis, C.K.R., **Menzies, A.K.**, Boyles, J.G. and Wojciechowski, M.S. 2011. Cutaneous water loss is a plausible explanation for mortality of bats from white-nose syndrome. **Integrative and Comparative Biology**. 51: 364-373.
- (2) Norquay, K.J.O., **Menzies, A.K.**, McKibbin, C.S., Timonin, M.E., Baloun, D.E., and Willis, C.K.R. (2010) Silver-haired bats (*Lasionycteris noctivagans*) found ensnared on burdock (*Arctium minus*). **Northwestern Naturalist**. 91:339-342.
- (1) Jonasson, K.A., Timonin, M.E., Norquay, K.J.O, **Menzies, A.K.**, Dubois, J. and Willis, C.K.R. (2010). Case study: a little brown bat (*Myotis lucifugus*) survives in the wild with only one foot. **Journal of Wildlife Rehabilitation** 30: 27-29.

AWARDS
Scholarships and Grants:

<u>Award</u>	<u>Value</u>	<u>Location Held</u>	<u>Period Awarded</u>
(18) Indigenous and Northern Affairs Northern Scientific Training Program Travel Grant	\$2800	McGill University	July 2017
(17) W. Garfield Weston Award for Northern Research (Doctoral)	\$50,000	McGill University	Jul 2017 – Jul 2019

(16) Indigenous and Northern Affairs Northern Scientific Training Program Travel Grant	\$3000	McGill University	April 2016
(15) GREAT Travel Award	\$400	McGill University	August 2016
(14) Indigenous and Northern Affairs Northern Scientific Training Program Travel Grant	\$3000	McGill University	May 2016
(13) GREAT Travel Award	\$400	McGill University	October 2015
(12) Indigenous and Northern Affairs Northern Scientific Training Program Travel Grant	\$3000	McGill University	August 2015
(11) GREAT Travel Award	\$350	McGill University	May 2015
(10) McGill Graduate Excellence Award	\$2000	McGill University	Sept 2014
(9) NSERC Vanier Post Graduate Scholarship	\$150,000	McGill University	Sept 2014 – Aug 2017
(8) NSERC Alexander Graham Bell Canada Graduate Scholarship (CGS-D)	\$105,000	N/A	Declined
(7) University of Winnipeg Graduate Studies Travel Grant	\$750	University of Winnipeg	Dec 2012
(6) Manitoba Graduate Scholarship	\$15000	University of Winnipeg	Sept 2012 – Sept 2013
(5) NSERC Alexander Graham Bell Canada Graduate Scholarship (CGS-M)	\$17500	University of Winnipeg	Sept 2011 – Sept 2012
(4) Undergraduate Research Travel Grant	\$750	University of Winnipeg	June 2010
(3) NSERC Undergraduate Student Research Award	\$6000	University of Winnipeg	May - Sept 2010
(2) NSERC Undergraduate Student Research Award	\$6000	University of Winnipeg	May - Sept 2009
(1) Marsha P Hannen Scholarship	\$2400	University of Winnipeg	Sept 2007

Other Awards:

(2) Graduate Student of Highest Distinction	N/A	University of Winnipeg	June 2014
(1) Gold Medal for Achievement in an Honours Course (Biopsychology)	N/A	University of Winnipeg	June 2011

CONFERENCE PRESENTATIONS

Nov 2016	Societe Quebecoise pour l'Etude Biologique du Comportement (SQEBC) <i>Rimouski, Quebec</i> (poster presentation)
July 2016	15th International Hibernation Symposium <i>Las Vegas, Nevada</i>
Nov 2015	Societe Quebecoise pour l'Etude Biologique du Comportement (SQEBC) <i>Quebec City, Quebec</i> (poster presentation)
Oct 2015	North American Symposium on Bat Research <i>Monterey, California</i>
May 2015	Canadian Society of Ecology and Evolution <i>Saskatoon, Saskatchewan</i>
Aug 2013	16th International Bat Research Conference and 43rd North American Symposium on Bat Research <i>San Jose, Costa Rica</i>
Oct 2012	42nd North American Symposium on Bat Research <i>San Juan, Puerto Rico</i>
Oct 2011	41st North American Symposium on Bat Research <i>Toronto, Ontario, Canada</i>
Jan 2011	Society for Integrative and Comparative Biology Annual Meeting <i>Salt Lake City, Utah, USA</i>
Oct 2010	40th North American Symposium on Bat Research <i>Denver, Colorado, USA</i>
Nov 2009	39th North American Symposium on Bat Research <i>Portland, Oregon, USA</i> (poster presentation)

RESEARCH EXPERIENCE AND TRAINING

- 2016 - present **Intern**, *Alberta Conservation Association and Alberta Trapper's Association* through the CREATE-Environmental Innovation program.
Supervisor: Robert Anderson, Senior Biologist, ACA
- Working with government biologists and local trappers to better understand energy requirements of boreal wolverines in the winter
Skills include: Wolverine live-trapping, snowtracking, science communication with trappers and general public, formulating a data agreement.
- 2014 - present **PhD Student**, *Natural Resource Sciences Department, McGill University*
- Thesis:** Biologging Bioenergetics of the Boreal Forest
Skills include: Live-trapping of red squirrels, snowshoe hares, and lynx; chemical immobilization of lynx and wolverine for handling/collaring; radio-telemetry; behavioural focals; metabolic measurements (BMR and/or FMR) on squirrels, snowshoe hares, lynx, and wolverine; blood and tissue sampling from squirrels, snowshoe hares, and lynx; snowtracking and kill-site investigations; mentoring and training junior students and field technicians; science communication (to communities, government, first nation organizations), field work and living for extended periods at in a remote, northern field camp
- 2014 **Wildlife Biologist**, *Joro Consultants, Winnipeg, Canada*
Supervisor: Dr. Erin McCance
- Skills include:** Acoustic and point-count surveys for breeding birds; wolf kill-site investigations; aerial telemetry surveys of large mammals; expanding written communication skills (official reports to clients)
- 2011 - 2014 **M.Sc. Student**, *Department of Biology, University of Winnipeg*
- Thesis:** Hibernation Energetics of Big Brown Bats
Skills include: Molecular lab techniques (DNA extraction, gel electrophoresis, PCR, western blot); long-term care of captive little brown bats; data analysis using R software (PCA, mixed effect models); mentoring and training junior students (honours students and research assistants)
- July 2013 **Volunteer Field Assistant**, *Bracken Cave and Bamburger Ranch, Texas, U.S.A*
Supervisor: Nathan Fuller, Department of Biology, Boston University
- Assisted in collecting 3D infrared videos of flying bats using high-end thermal cameras to help understand group flight behaviour of bats.
- July 2012 **Ecological Energetics Field Course**, *Department of Biology, University of Winnipeg*
- Field course intended to give students hands-on experience with ecological research techniques.
Skills include: Small mammal trapping (chipmunks, squirrels, voles and bats);

short-term care of captive, wild animals; measurement of metabolic rates (open-flow respirometry); telemetry

2009 – 2012 **Research Assistant, Department of Biology, University of Winnipeg**
Supervisor: Dr. C. Willis

Assisted with projects on bat ecology, long-distance movements, and energetics.
Skills include: Capture of free-ranging bats using mist-nets and harp traps; implanting passive transponders (PIT-tag); behavioural measurements (e.g., novel environment test); bat mortality surveys at wind turbines in southern Manitoba; field work and camping in a wide range of conditions (i.e., -35°C to +35°C)

2007 - 2008 **Summer Research Student for Agriculture and Agri-foods Canada, Brandon Research and Development Centre, Brandon, Manitoba, Canada**

Field assistant in the Agronomy department.
Skills include: Planting, maintaining and harvesting crops; crop disease surveys; collecting, drying and grinding crop biomass samples; supervising junior field crew members

TEACHING EXPERIENCE

- 2015 **Guest Lecturer, WILD 307 (3) – Natural History of Vertebrates**
Natural Resource Sciences Dept, McGill University
- 2015 **Guest Lecturer, WILD 421 (3) – Wildlife Conservation**
Natural Resource Sciences Dept, McGill University
- 2014 **Guest Lecturer, WILD 307 (3) – Natural History of Vertebrates**
Natural Resource Sciences Dept, McGill University
- 2014 **Field Instructor, BIOL 4206 (3) – Field Methods in Ecological Energetics**
Dept of Biology, University of Winnipeg
- 2014 **Lab Instructor, BIOL 1116 (3) – Evolution, Ecology and Biodiversity**
Dept. of Biology, University of Winnipeg
- 2013 **Lab Instructor, BIOL 1115 (3) – Cells and Cellular Processes**
Dept. of Biology, University of Winnipeg
- 2012 **Marker, BIOL 3562 (3) – Biology of Human Reproduction**
Dept. of Biology, University of Winnipeg
- 2011 **Marker, PSYCH 4100 (6) – Research Design and Data Analysis**
Dept. of Psychology, University of Winnipeg
- 2008-2011 **Laboratory Demonstrator, BIOL 2111 (6) – Comparative Chordate Zoology**
Dept. of Biology, University of Winnipeg

COMMITTEES AND ASSOCIATIONS

2016 - present	Graduate Student Representative, Natural Resource Sciences Departmental Committee Invited, volunteer position
2016 - present	Departmental Representative, Macdonald Campus Graduate Student Society Volunteer position
2016	Advisory Committee to the Dean for appointment of a NRS Department Chair, Student Representative - McGill University Invited Position
2011/2012, 2014	University of Winnipeg Strategic Review Steering Committee Student Representative Invited position
2013/2014	The Manitoba Chapter of the Wildlife Society Graduate Student Representative Elected, volunteer position
2012/2013	Student Representative on the Search/Selection Committee for a Vice President of Research and Innovation - University of Winnipeg Invited position
2012/2013	University of Winnipeg Student Association Graduate Student Co-director Elected, volunteer position.

OUTREACH AND COMMUNITY INVOLVEMENT:
Public Outreach Presentations:

I have presented outreach talks in both English and French for over 20 school groups, 10 community organizations (e.g., senior homes, girl guide meetings) and various University functions. I have also organized, facilitated and participated in numerous hands-on workshops (for classrooms, community groups, etc) at my field stations or in the communities in which I have conducted research.

Invited Outreach Presentations and Demonstrations:

- (5) “Live-trapping for science” Kwanlin Dün Cultural Centre, Whitehorse, Yukon. As part of *UnFURled*, a Yukon fur auction and trapping rendezvous. Audience: over 1000 community members visiting fur auction and trapping workshops
- (4) “Research in the Kluane Region” St Elias Centre, Haines Junction, Yukon. February 20, 2015. Audience: community members, regional biologists, wildlife enthusiasts (20 people).
- (3) “Adventures in a frozen land: learning about hibernation behaviour and conservation of bats”, Graduate Studies Open House, University of Winnipeg, Department of Graduate Studies, Winnipeg, Manitoba, Canada, October 2013. Audience: prospective and current graduate students (30 people)

- (2) “Flying Mammals, Fur, and Fungus: Fighting to Save Canada’s Threatened Bats”, The Wildlife Society (Manitoba Chapter) Winter Retreat, Camp Wannakumbac, Riding Mountain National Park, Manitoba, Canada, February 2013. **Invited Keynote Presentation.** Audience: undergraduate and graduate students, wildlife professionals (75 people)
- (1) “Bat Research in Manitoba”, Riding Mountain National Park Summer Research Seminar Series, RMNP Interpretive Centre, Wasagaming, Manitoba, Canada, August 2013. Audience: general public, cabin owners, wildlife enthusiasts (50 people)

Other Volunteering:

- 2017 ***Intercultural Indigenous Workshop Organizing Committee, McGill University***
- 2017 **Guest Blogger, McGill GradLife Blog**
- 2017 **MacDonald Campus Women in Science Group Founder**
- 2017 **North American Indigenous Games – U19 Volleyball Team Coach and Chaperone**
Toronto, Ontario
- 2016, 2017 ***Skype a Scientist presenter***
Five presentations to elementary, junior, and high schools in the United States via Skype on a range of topics (bat ecology, predator-prey dynamics, habitats)
- 2016, 2017, 2018 **Science Fair and Heritage Fairs – Volunteer Judge**
St Elias School, Haines Junction, Yukon
- 2016 **Canada-Wide Science Fair – Departmental Representative**
McGill University, Montreal, Quebec
- 2015 **The Wildlife Society Annual Conference – Volunteer**
Winnipeg, Manitoba, Canada
- 2015 ***Canadian Society of Ecology and Evolution - Symposium Organizer***
University of Saskatchewan, Saskatoon, Saskatchewan
- 2011/2012 ***Lets Speak Ojibwe with Wab Kinew - Volunteer “scientist”***
Family-friendly science activities, paired with language lessons for inner-city families
Wii Chiiwaakanak Learning Centre - University of Winnipeg
- 2008-2013 ***Lets Talk Science - Volunteer and Graduate Student Coordinator***
University of Winnipeg
- 2012/2013 **University of Winnipeg Biology Journal Club – Founder**
- 2013 **University of Winnipeg Research Colloquium - Moderator**
- 2011-2014 **Volleyball Coach - North American Indigenous Games Manitoba Provincial Team, Jr Wesmen Club Teams (U12, U14, U16, U18 age groups)**

- Participated in Aboriginal Coach Module Training and Workshop

2011 **Canadian Parks and Wilderness Society (CPAWS) “Youth Night” - Member**
A brainstorming session in how to get youth involved in protection of land and conservation

2009/2010 **The University of Winnipeg Animal Enrichment Club – Member**
Provided enrichment activities for zoo animals at the Assiniboine Park Zoo

JOURNAL REVIEWER

- Proceedings of the Royal Society B
 - PLOS ONE (x2)
 - Behavior (x5)
 - Physiology and Behavior (x2)
 - Ecology and Evolution
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CERTIFICATION

Oct 2015, Sept 2016 Chemical Immobilization Course – Canadian Association of Zoo and Wildlife Veterinarians

May 2014 Aboriginal Coaching Module Training and Workshop – Manitoba Aboriginal Sport and Recreation Council

Aug 2014 McGill University Animal User Training Course

Annually, since 2008 Workplace Hazardous Materials Information System (WHMIS) Training

July 2012 Wilderness First Aid Course and CPR Training – St John Ambulance

PROFESSIONAL MEMBERSHIPS

Canadian Society of Ecology and Evolution (CSEE)

The Wildlife Society (Manitoba Chapter and Canadian Section)

Centre de la Science de la Biodiversité du Québec/Québec Centre for Biodiversity Science (QCBS)

Société Québécoise pour l'Étude Biologique du Comportement (SQEBC)

North American Society for Bat Research (NASBR)

REFERENCES: *available on request