

# LANNA M. DESANTIS B.Sc, M.Sc

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2140 East Bank Drive • Peterborough ON K9J 7B8 Canada

**Environmental & Life Sciences Graduate Program • Email: [lannadesantis@trentu.ca](mailto:lannadesantis@trentu.ca)**

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## PROFILE

*Ph.D. Candidate*

*Proficient knowledge of current field and laboratory techniques*

*Seven+ years work experience in field biology*

*Six+ years teaching and research experience*

## EDUCATION

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|-----------------|---|-----------------|
| Ph.D. Candidate | <u>Trent University, Peterborough ON</u><br>Kawartha Flying Squirrel Project<br>Environmental & Life Sciences Graduate Program<br>Supervisors: Dr. Jeff Bowman (Ontario Ministry of Natural Resources & Forestry)<br>Dr. Gary Burness | 2011 to Present |
| M.Sc.           | <u>University of Toronto Scarborough, Scarborough ON</u><br>Centre for the Neurobiology of Stress<br>Ecology & Evolutionary Biology<br>Supervisor: Dr. Rudy Boonstra  | 2008 – 2011     |
| B.Sc. (Hons)    | <u>University of Toronto Scarborough, Scarborough ON</u><br>Specialist Program in Environmental Science: Environmental Biology Stream<br>Graduated with Distinction<br>Honours Supervisor: Dr. Rudy Boonstra                          | 1996 - 2000     |

## PUBLICATIONS

- Desantis LM**, Bowman J, Lahoda CV, Boonstra R, Burness G. (2015) Responses of New World flying squirrels to the acute stress of capture and handling. *Journal of Mammalogy*. *In Press*.
- Desantis LM**, Delehanty B, Weir JT, Boonstra R. (2013) Mediating free glucocorticoid levels in the blood of vertebrates: Are corticosteroid-binding proteins always necessary? *Functional Ecology* 27: 107-119.
- Boonstra R, **Desantis L**, Krebs CJ, Hik DS. (2008) Climate and nutrient influences on the growth of white spruce trees in the boreal forests of the Yukon. *Climate Research* 36: 123-130.
- Boonstra R, Lane JE, Boutin S, Bradley A, **Desantis L**, Newman AEM, Soma KK. (2008) Plasma DHEA levels in wild, territorial red squirrels: Seasonal variation and effect of ACTH. *General and Comparative Endocrinology* 158: 61-67.
- Boonstra R, **Bowman (née Desantis) L**. (2003) Demography of Short-Tailed Shrew Populations Living on Polychlorinated Biphenyl-Contaminated Sites. *Environmental Toxicology and Chemistry* 22: 1394-1403.

**AWARDS**Major External Awards

- Ontario Graduate Scholarship (OGS)**, held at Trent University (\$10 000) 2015  
Source: Ontario Ministry of Training, Colleges and Universities (Provincial)
- Ontario Graduate Scholarship (OGS)**, held at Trent University (\$15 000) 2012 - 2013  
Source: Ontario Ministry of Training, Colleges and Universities (Provincial)
- Ontario Graduate Scholarship (OGS)**, held at University of Toronto (\$15 000) 2008 – 2009  
Source: Ontario Ministry of Training, Colleges and Universities (Provincial)
- Undergraduate Student Research Award (USRA)**, held at University of Toronto (\$4500) 1999 – 2000  
Source: Natural Sciences and Engineering Research Council of Canada (National)

Competitive Internal Awards

- Dean's Award of Excellence**, held at Trent University (\$3000) 2012 – 2013
- Helen Sawyer Hogg Graduate Admission Award**, held at University of Toronto (\$3300) 2008
- J. Douglas Roseborough Prize in Zoology**, held at University of Toronto (\$280) 2008 – 2009

Internal Awards and Bursaries

- ABS Bennett Bursary**, held at Trent University (\$1000) 2014, 2015  
For a female graduate student demonstrating community leadership and involvement
- McCuaig-Throop Bursary**, held at University of Toronto (\$2000) 2009 – 2010
- Frederick P. Ide Graduate Award**, held at University of Toronto (\$2158) 2009 – 2010
- Frederick P. Ide Graduate Award**, held at University of Toronto (\$1920) 2008 – 2009
- Golden Key International Honour Society**, University of Toronto Chapter 2001  
Recognition of Outstanding Scholastic Achievement and Excellence. Inducted 2001.

**PRESENTATIONS**

- Desantis LM**, Bowman J, Boonstra R, Burness G. (2015) Seasonal differences in stress reactivity in New World flying squirrels: shedding light on physiological function and natural history. Canadian Society of Zoologists. University of Calgary, Calgary, Alberta.  
(Ph.D. dissertation work; Oral Presentation, National Conference)
- Desantis LM**, Bowman J, Lahoda CV, Boonstra R, Burness G. (2015) Responses of New World flying squirrels to capture stress: functioning in the absence of corticosteroid-binding globulin. Society for Integrative and Comparative Biology – 2015 Annual Meeting. West Palm Beach, Florida, USA. **One of seven finalists for the 2015 Division of Comparative Endocrinology Aubry Gorbman Award for Best Student Oral Presentation**  
(Ph.D. dissertation work; Oral Presentation, International Conference)
- Desantis LM**. (2014) High stress hormone levels in flying squirrels: Why are they not dead? Trent University, Symons Seminar Series (*chosen as one of seven annual science speakers from a competitive pool of abstract submissions*)  
(Ph.D. dissertation work; Oral Presentation, Cross-discipline graduate student seminar series)
- Desantis LM**, Wehtje M. (2014) Working with wildlife: techniques, appreciation and awareness. Trent University, Trent Wildlife Society.  
(Ph.D. dissertation, M.Sc. thesis, professional work experience; Oral Presentation, mentoring for an undergraduate society)

**PRESENTATIONS cont'd**

- Desantis LM**, Bowman J, Lahoda CV, Boonstra R, Burness G. (2014) Stress profiles in New World flying squirrels: impacts of acute stress induced by live-trapping and handling. Genomes to Biomes: Joint conference for the Canadian Society for Ecology & Evolution, the Canadian Society of Zoologists and the Society of Canadian Limnologists. McGill University, Montreal, Quebec.  
(Ph.D. dissertation work; Oral Presentation, National Conference)
- Desantis LM.** (2013) Coping with stress. Online podcast interview. Functional Ecology.  
(*Invited Interview*)
- Desantis L**, Delehanty B, Weir JT and Boonstra R. (2011) Some like it high: Minimizing free glucocorticoid is not the only option. Frontiers in Endocrinology. Conference Abstract: NASCE 2011: The inaugural meeting of the North American Society for Comparative Endocrinology. University of Michigan, Ann Arbor, Michigan, USA.  
(M.Sc. thesis work; Poster Presentation, International Conference)
- Desantis L** and Boonstra R. (2009) Stress profiles of flying squirrels in central Ontario: Contrast with red and Arctic ground squirrels. 5th International Colloquium on Arboreal Squirrels. Thompson Rivers University, Kamloops, British Columbia.  
(M.Sc. thesis work; Oral Presentation, International Conference)
- Boonstra R and **Desantis L.** (2000) The effects of long-term fertilization on nutrient-limited White Spruce trees in Canada's Yukon. Association of Canadian Universities for Northern Studies. Université Laval, Quebec City, Quebec.  
(B.Sc. Honours thesis work; Poster Presentation, National Conference)

**TEACHING EXPERIENCE**Supervisory Experience

C. Lahoda, Ontario Ministry of Natural Resources (OMNRF) Internship Student 2011 – 2012

Mentoring Experience

Graduate and Research Training in Field and Laboratory Techniques

Ph.D. students: L. Kennedy, A. Anderson, S. Lavergne 2011 – Present

M.Sc. students: M. Olson, P. Edwards, G. Rand, N. Kelly, Y. Majchrzak, M. McKay

Field Technicians: J. McNamara, L. Baldwick, S. Clifton, C. Lahoda

Undergraduate students: C. Knuth, J.Kroes, N. Hogle, T. Kelly

Ph.D. students: H. Wheeler, M. Richter 2008 – 2011

M.Sc. students: A. Bettio, J. Van Eindhoven

Field Assistants: G. Keresztesi, J. Middleton

MNR Staff: K. Sobey, L. Bruce 2007

Several Arcadis JSA staff and consultants 2001

M.Sc. student: Q. Fletcher

**TEACHING EXPERIENCE cont'd***Teaching Assistant*

2015	Mammalogy (4 <sup>th</sup> Year Level – Trent University) Animal Physiology (3 <sup>rd</sup> Year Level – Trent University)
2014	Mammalogy (4 <sup>th</sup> Year Level – Trent University) Animal Physiology (3 <sup>rd</sup> Year Level – Trent University)
2013	Mammalogy (4 <sup>th</sup> Year Level – Trent University) Animal Physiology (3 <sup>rd</sup> Year Level – Trent University)
2012	Evolution (2 <sup>nd</sup> Year Level – Trent University) Current Topics in Biology II (1 <sup>st</sup> Year Level – Trent University, online course) Methods of Biological Inquiry (2 <sup>nd</sup> Year Level – Trent University) Animal Physiology (3 <sup>rd</sup> Year Level – Trent University)
2011	Bio-Help TA: Introductory Biology (1 <sup>st</sup> Year Level, University of Toronto) Animal Physiology (2 <sup>nd</sup> Year Level – University of Toronto) Animal Physiology (3 <sup>rd</sup> Year Level – Trent University)
2010	Bio-Help TA: Introductory Biology (1 <sup>st</sup> Year Level, University of Toronto) Field Course in Ecology (3 <sup>rd</sup> Year Level – University of Toronto) Animal Physiology (2 <sup>nd</sup> Year Level – University of Toronto, winter and summer sessions)
2009	Field Course in Ecology (3 <sup>rd</sup> Year Level – University of Toronto) Animal Physiology (2 <sup>nd</sup> Year Level – University of Toronto)
2008	Introductory Biology (1 <sup>st</sup> Year Level – University of Toronto, winter and fall sessions)
2007	Introductory Biology (1 <sup>st</sup> Year Level – University of Toronto)

**OTHER ACADEMIC PARTICIPATION**

<b>Animal Care Committee Member</b> (Trent University)	2014-2015
Graduate Student Representative for the Trent Graduate Student Association	
<b>Symons Seminar Series Executive Committee Member</b> (Trent University)	2012-2013, 2013-2014
<i>Communications Coordinator</i>	
Handled and organized abstract submission, abstract selection committee, seminar judge committee, contact with selected speakers, speaker schedule, monthly seminar series ads, writing of seminar discussion questions, coordination of seminar refreshments, chaired all seminar events, planned year-end seminar series Gala event.	
<b>Symons Seminar Series Judge</b> (Trent University)	2011-2012
Attended monthly seminars to evaluate speakers according to the Series' criteria Attended year-end Judges' meeting to determine the Series' winner and runner-up	
<b>Symons Seminar Series Abstract Selector</b> (Trent University)	2011-2012
Ranked submitted, anonymous abstracts according to the Series' criteria	
<b>Selection Committee Member</b> (Trent University)	2012
Graduate Student Representative for selection of the new Chair of Biology	

**OTHER ACADEMIC PARTICIPATION cont'd**

- Selection Committee Member** (University of Toronto) 2010  
Graduate Student Representative for selection of the recipient of the *Graduate Student Research Award*.
- Graduate Student Association Member** (University of Toronto) 2009-2010  
Environment Representative, Graduate Student Association Scarborough (GSAS)

**COMMUNITY OUTREACH and VOLUNTEER WORK**

- Science Fair Judge** 2012, 2015  
Peterborough Region elementary and high school level Science Fair, Peterborough ON  
Grade 7-8 category
- Peterborough Dragon Boat Festival Participant** 2014  
Graduate students formed a Dragon Boat Race team to raise money in support of breast cancer detection, treatment and care at Peterborough Regional Health Centre and the Breast Assessment Centre  
Collected the highest amount of donation money on the team
- Peterborough Ride for the United Way Participant** 2013  
OMNRF employees and associates raised money for the United Way via a 10-25 km bike ride throughout the city  
Received prize for collection of the most donation money
- Small Mammals Expert** 2011-2012  
Rouge Valley Conservation and Citizen Scientists groups, Toronto ON  
Provided knowledge and information about mammals found in the Rouge Valley Conservation Area to the public during the 2011 and 2012 *Rouge Valley Eco Exploration Event*, and during the 2011 *Fall for the Rouge* event. Wrote a lay description of flying squirrel ecology and natural history for the Rouge Valley Conservation Centre's new *LivingRoom* Interpretive Centre.
- Aerial Baiting** 2007  
OMNR Rabies Research and Development Unit, Stratford ON  
Loaded oral baits containing rabies vaccine onto conveyor belt for aerial distribution over southern Ontario on twin otter airplanes
- Teaching Assistant** 2001  
University of Toronto (Field Ecology class): Wildlife Research Station, Algonquin Park ON  
Taught techniques for small mammal trapping, plant identification, obtaining field data for calculation of plant/animal population density estimates.
- Field Assistant** 2001  
Long Point Bird Observatory, Long Point ON  
Assisted in catching, handling and banding birds using mist nets. Recorded bird calls and biological information such as sex, age and general condition

## OTHER RELEVANT TRAINING AND EXPERIENCE

<b>Graduate Teaching Assistant Certificate of Teaching Experience</b> , Trent University	2014
<b>Radiation Safety Level II</b> , Trent University	2011, 2015
<b>Bio-safety Level II</b> , Trent University	2011, 2015
<b>WHMIS Training</b> , Trent University	2011
<b>Transportation of Dangerous Goods</b> , Trent University	2011
<b>First Aid &amp; CPR/AED Level C Certification</b> , First Aid Safety Training (F.A.S.T.) Rescue Inc. Peterborough ON	2011
<b>Teaching Assistant Certificate of Training</b> , University of Toronto	2010
<b>Ecological Land Classification for Southern Ontario (ELC)</b> Gartner Lee Ltd., Turkey Point ON	2004
<b>SCUBA Certification</b> , SCUBA 2000 / Scarborough Underwater Club Inc., Scarborough ON	2002

## WORK HISTORY

<b>Laboratory Research Technician</b> , University of Toronto, Scarborough ON	2007
<b>Rabies Research Technician</b> Ontario Ministry of Natural Resources Rabies Research and Development Unit Peterborough ON	2006, 2007
<b>Plum Pox Virus (PPV) Sampling Team Lead</b> , Agricorp, St. Catharines ON	2004, 2005, 2006
<b>Winery Cellar Person</b> Andres Wines Ltd. (Hillebrand Estates Winery), Niagara-on-the-Lake ON	2003-2004
<b>Plum Pox Virus (PPV) Sampling Technician</b> , Agricorp, St. Catharines ON	2003
<b>Scientific Research Technician</b> Arcadis JSA (an environmental consulting company), and General Electric, Housatonic River Flood Plain, Pittsfield MA USA	2001-2002
<b>Field Research Technician</b> , University of Toronto, Scarborough ON	2000-2001
<b>Field Research Assistant</b> University of Toronto, Arctic Institute of North America, Kluane Lake, Yukon	1999
<b>Soil Science Research Assistant</b> , University of Toronto, Scarborough ON	1999
<b>Aquatic Ecology Research Assistant</b> , University of Toronto, Scarborough ON	1998

**REFERENCES**

**Gary Burness, Ph.D.**

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**Jeff Bowman, Ph.D.**

*Research Scientist*  
Wildlife Research & Development Section  
Ontario Ministry of Natural Resources & Forestry

*Adjunct Professor*  
Environmental & Life Sciences Graduate Program

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**Rudy Boonstra, Ph.D.**

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