

## Tristan Frappier-Brinton

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### EDUCATION

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- 2021-present PhD in Biology at Duke University with supervisor Dr. Anne Yoder. Thesis work focused on the effects of forest fires on tropical forest and lemur distributions.
- 2019-2021 Master of Science in Evolutionary Anthropology with a collaboration in Environmental Studies at the University of Toronto with supervisor Dr. Shawn Lehman. Thesis titled “The burning island: Spatiotemporal patterns of fire occurrence in Madagascar”
- 2014-2018 Bachelor of Science (Honours) with Distinction in Biology with a Minor in Classical Studies from Queen’s University with a 4.2 GPA (out of 4.3)

### PUBLICATIONS

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*Camille DeSisto\**, **Tristan Frappier-Brinton\***, *Elise Boos*, & *Ranaivo Rasolofoson*. *Tourist visits to Madagascar's protected areas linked to deforestation decreases within but increases outside protected area boundaries. (in Revisions)*.

Alison D. Axtman, Paul E. Brennan, **Tristan Frappier-Brinton**, Ranjita Betarbet, Gregory W. Carter, Haiyan Fu, Opher Gileadi, Anna K. Greenwood, Karina Leal, Frank Longo, Lara M. Mangravite, & Emory-Sage-SGC TREAT-AD Center. (2023). Open drug discovery in Alzheimer's disease. *Alzheimer's & Dementia: Translational Research & Clinical Interventions*, 9(2), p.e12394.

**Tristan Frappier-Brinton**, & Shawn M. Lehman. (2022). The burning island: Spatiotemporal patterns of fire occurrence in Madagascar. *PloS one*, 17(3), e0263313.

Adrián César-Razquin, Berend Snijder, **Tristan Frappier-Brinton**, Ruth Isserlin, Gergely Gyimesi, Anne Phelan, Reinhard R.A. Reithmaier, David Hepworth, Matthias A. Hediger, Aled M. Edwards, & Giulio Superti-Furga. (2015). Solute carriers: time for systematic research on the most neglected human genes. *Cell*, 162, 478-487.

### RECENT PRESENTATIONS

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**T. Frappier-Brinton**. (2024) Oral Presentation: Post-fire differences in the abundance and distributions of lemur species across ecological niches in tropical dry forest. Ecological Society of America Conference 2024, Long Beach California.

**T. Frappier-Brinton**. (2023) Invited Speaker: Effects of forest fires on lemur populations and habitat in tropical dry forest. Climate-Plant Innovation Center Symposium, Duke University, Durham, NC, USA.

**T. Frappier-Brinton**. (2023). Invited Speaker: Effects of forest fires on lemur abundance and food availability in tropical dry forest. University of Antananarivo, MZBA seminar (Mention Zoologie et Biodiversité Animale). Antananarivo, Madagascar.

**T. Frappier-Brinton**. (2022). Invited Speaker: Abundance of lemur species and food resources in burned habitat in Ankaranfantsika National Park. University of Antananarivo, MZBA seminar (Mention Zoologie et Biodiversité Animale). Antananarivo, Madagascar.

**T. Frappier-Brinton.** (2021). Paper Presentation: The burning island: Spatiotemporal patterns of fire occurrence in Madagascar. Canadian Association for Physical Anthropology Conference 2021, virtual.

**T. Frappier-Brinton.** (2020). Paper Presentation: The effectiveness of different protected area types at reducing forest fire frequency in Madagascar. Canadian Association for Physical Anthropology Conference 2020, virtual.

## **RESEARCH EMPLOYMENT HISTORY**

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- July-Aug 2019    **Research Assistant**, part-time, Structural Genomics Consortium in Toronto
- Extended previous research using Perl programming language and Pubmed database to study trends in kinase research over time
- May-Aug 2018    **Research Assistant**, full-time, Queen's University in the lab of Dr. Stephen Lougheed
- Spent half of my time in Kingston studying genetic markers in polar bears and variation between populations with the BEARWATCH conservation project
  - Spent half of my time in the field conducting tree swallow monitoring, handling, and measurement for individuals in the 200+ nest boxes at the Queen's University Biological Station
- May-Aug 2017    **Research Assistant**, full-time, Queen's University in the lab of Dr. Stephen Lougheed
- Work funded by an undergraduate student research award from NSERC, focusing on the genetics of Arctic fishes, with the goal of sequencing the whitefish genome
  - Gained experience in laboratory techniques like DNA and RNA extraction from tissues, and field planning and sample collection for two other projects on musk turtle detection and Lyme disease prevalence in ticks at the Queen's University Biological Station
- May-Aug 2016    **Research Assistant**, full-time, Sunnybrook Hospital in the lab of Dr. Samira Mubareka
- Planned and conducted viral transmission study in a pig barn outside of Guelph (swine flu) and assisted study of a bat colony at McMaster University (coronaviruses)
  - Gained experience in laboratory techniques like RNA extraction, real-time/quantitative PCR and gel electrophoresis
- May-Aug 2015    **Research Assistant**, full-time, Structural Genomics Consortium in Toronto
- Studied cancer cell proliferation under Dr. Panagiotis Prinios and Dr. Aled Edwards
  - Gained experience with Excel and the image analysis software CellProfiler
- July- Aug 2014    **Research Assistant**, full-time, at the University of Toronto with Dr. Aled Edwards
- Studied biology research trends (focusing on kinases and solute carriers) in the bioinformatics lab of Dr. Gary Bader
  - Extensive work with Excel and programming in Perl led to Cell publication

## **TEACHING EMPLOYMENT**

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Spring 2025    **Teaching Assistant** at Duke University for BIOLOGY 202: Genetics and Evolution

- Fall 2024      **Teaching Assistant** at Duke University for UNIV 102: Let's Talk About Climate Change
- Summer 2021 **Teaching Assistant** at the University of Toronto Mississauga in the Department of Anthropology for ANT202 (Biological Anthropology: Human Variation and Adaptation)
- 2019 - 2021 **Teaching Assistant** at the University of Toronto Scarborough in the Department of Anthropology for ANTB15 (Contemporary Human Evolution and Variation) (Fall 2019, Fall 2020) and ANTC68 (Deconstructing Epidemics) (Spring 2020, Spring 2021)
- 2019 - 2020 **High School Math and Science Tutor** at an Oxford Learning Centre

### **OTHER PERSONAL DEVELOPMENT**

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- March 2023      Professional Accountability Certification Training (PACT), *Duke University, Department of Biology, Durham, NC*
- March 2023      Field Futures Workshop: Preventing Sexual Harassment and Assault in Field Settings, Duke University, Durham, NC, USA

### **RESEARCH FUNDING – VALUES IN USD**

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- 2024      Duke Biology Grant-in-Aid (**\$1,000**)
- 2024      Duke Conference Travel Support (**\$525**)
- 2023      Re:wild Research Grant (**\$5,000**)
- 2023      Primate Conservation Inc. Research Grant (**\$1,600**)
- 2022      Re:wild Research Grant (**\$4,575**)
- 2022      Duke International Dissertation Travel Award (**\$3,000**)
- 2020      Primate Conservation Inc. Research Grant (**\$2,600**)

### **FELLOWSHIPS AND SCHOLARSHIPS – VALUES IN CAD**

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- 2021      NSERC Postgraduate Scholarship – Doctoral (**\$63,000** over 3 years)
- 2020      Ontario Graduate Scholarship (**\$15,000**)
- 2020      Arthur and Sonia Labatt Fellowship from U of T School of the Environment (**\$5,000**)
- 2020      Jeanne F. Goulding Fellowship from University of Toronto (**\$2,000**)
- 2019      NSERC Canada Graduate Scholarship – Master's Award (**\$17,500**)
- 2018      Kingston Field Naturalists' Award at the Queen's University Biological Station (**\$1,500**)
- 2018      NSERC Undergraduate Student Research Award (**\$4,500**)
- 2017      Queen's University Arthur Loudon Scholarship in Biology – for the highest or 2nd highest GPA in 4<sup>th</sup> year Biology (**\$3,400**)
- 2017      Queen's University Marc D. Rigby Scholarship in Classical Studies (2nd time awarded) (**\$1,200**)
- 2017      NSERC Undergraduate Student Research Award (**\$4,500**)
- 2016      Queen's University Marc D. Rigby Scholarship in Classical Studies (**\$1,200**)
- 2016      Queen's University Mary McGregor Walker Scholarship (Biology) (**\$1,700**)
- 2016      D + H Sunnybrook Research Institute Summer Student Award (**\$3,200**)
- 2015      Queen's University Dean's List with Distinction (Top 3% of Arts and Science Students) (**N/A**)
- 2015      Queen's University James H. Rattray Scholarship (Biology) (**\$1,000**)