Katherine **Eaton**

PhD Candidate · Software Developer · Bioinformatician · Anthropologist

Hamilton, Ontario, Canada

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Summary

Katherine is a multidisciplinary researcher, bridging the gap between the sciences as a computational biologist, and the humanities as an anthropologist of infectious disease. As a senior PhD candidate, she is occupied with writing papers, giving conference talks, and supporting laboratory training and facility operations.

Education

McMaster University
PhD in Anthropology (MA-To-PhD Fast-Track)

Hamilton, Canada
2014 - Present

- Thesis: Plague Phylogeography: Novel Synthesis and Geospatial Analysis
- Advisor: Dr. Hendrik Poinar

University of Toronto Mississauga
Open Studies

Mississauga, Canada
2013 - 2014

- Coursework in Computer Science, Mathematics, and Bioinformatics.
- Advisor: Dr. Esteban Parra

University of Alberta
B.A. in Anthropology

Edmonton, Canada
2009 - 2013

- Thesis: Evaluation of Biodeterioration in Deer Bone Inoculated with *Amycolatopsis* sp. Using SEM.
- Advisor: Pamela Mayne Correia

Work Experience

McMaster University
Masters-to-PhD Fast-Track Student (Dept. of Anthropology)

Hamilton, Canada
2014 - Present

- Provide undergraduate-level course instruction and assessment (ANTH and BIO).
- Provide graduate-level training in laboratory techniques and computational analysis.

Lewis & Ruth Sherman Centre for Digital Scholarship
Graduate Resident

Hamilton, Canada
2017 - 2020

- Software development for high-throughput genomic analyses.

MacData Institute
Graduate Fellow

Hamilton, Canada
2017 - 2018

- Formation of the new McMaster Digital Pedagogy Working Group.
- Graduate Colloquium presentation, community building.

McMaster University
Research Assistant (McMaster Ancient DNA Centre)

Hamilton, Canada
2014, 2019 - 2021

- Bioinformatic Analysis
- Manuscript Preparation
- DNA Extraction, NGS Library Prep, Bacterial Genome Sequencing

University of Toronto Mississauga
Volunteer (Dept. of Anthropology)

Mississauga, Canada
2013 - 2014

- Annotation of genes associated with pigmentation in East Asian populations.

University of Alberta
Volunteer, Summer Student (Dept. of Surgery)

Edmonton, Canada
2011 - 2013

- Molecular biology assays and cell tissue culture, DNA sequence analysis.
- Immunodetection of genes involved in skeletal development.

University of Alberta
Undergraduate Thesis Student, (Dept. of Anthropology)

Edmonton, Canada
2012 - 2013

- Scanning Electron Microscopy (SEM) of bone.

Public Output

Peer-Reviewed Publication

2020	**A Black Death mass grave at Thornton Abbey, Lincolnshire: the discovery...**, Co-Author	*Journal*
2020	**NCBImeta: efficient and comprehensive metadata retrieval from NCBI databases**, Author	*Journal*
2019	**Genetic resiliency and the Black Death: No apparent loss of mitogenomic...**, Co-Author	*Journal*

Presentation

2021	**Plague phylogeography: Novel synthesis and geospatial analysis**, Presenter	*Podium*
2020	**Presenting "The Plague": Digital exhibits as interdisciplinary method**, Presenter	*Exhibit*
2019	**Digging into digital anthropology: Project-based learning**, Presenter	*Podium*

Software

2021	**Autologs: Automatically create release notes and a changelog.**, Developer	*Github*
2019	**NGSeXplore: Exploratory data analysis of NGS Data**, Developer	*Github*

Institutional Blog

2020	**Why is it so hard to get data?**, Author	*Blog*
2019	**University classrooms: difficult to escape or tempting to engage?**, Author	*Blog*
2018	**Database programming for automated metadata retrieval**, Author	*Blog*
2019	**Plotting a pandemic**, Author	*Blog*

Honors & Awards

Research

2019	**HASTAC Scholars Fellowship**, $600	*International*
2019	**Sherman Centre for Digital Scholarship Bursary**, $500	*Hamilton, Canada*
2018	**Anthropology Graduate Conference and Travel Competition**, $600	*Hamilton, Canada*
2012	**Undergraduate Research Initiative**, $250	*Edmonton, Canada*
2012	**Collective Body for Arts Students Individual Grant**, $500	*Edmonton, Canada*

Academic

2019-2021	**McMaster Graduate Bursary**, $3400	*Hamilton, Canada*
2016-2019	**Joseph-Armand Bombardier CGS Doctoral Scholarship** , $105000	*Hamilton, Canada*
2017	**MacDATA Graduate Fellowship**, $7500	*Hamilton, Canada*
2015	**Canadian Graduate Scholarship Master's Program**, $17500	*Hamilton, Canada*
2014-2017	**Anthropology Graduate Scholarship**, $16000	*Hamilton, Canada*
2013	**University of Toronto Advanced Planning for Students Grant**, $5000	*Mississauga, Canada*
2012	**Erindale Bursary**, $800	*Mississauga, Canada*
2010-2012	**Suncore Energy Scholarship**, $3000	*Edmonton, Canada*
2009-2012	**Jason Lang Scholarship**, $4000	*Edmonton, Canada*

Committees & Service

2019-2021	**Fellow**, HASTAC Scholars	*International*
2019-2020	**Co-Founder**, McMaster Digital Pedagogy Working Group	*Hamilton, Canada*
2018	**Conference Executive Chair**, Rewriting Plague: History Meets Science	*Hamilton, Canada*
2018	**Conference Organizing Committee**, System/Système D: Improvising Digital Scholarship	*Hamilton, Canada*
2017-2018	**General Member**, President's Advisory Council for Building an Inclusive Community	*Hamilton, Canada*
2016-2018	**General Member**, European Association of Archaeologists	*Hamilton, Canada*