**Celso Antônio Alves Neto**

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**AREAS OF SPECIALIZATION**

Philosophy of Science, Philosophy of Biology, Philosophy of Race

**AREAS OF COMPETENCE**

Applied Ethics, Metaphysics, Philosophy of Mind and Language, Gender Studies

**APPOINTMENTS**

**Postdoctoral Research Fellow**, Dalhousie University, Canada 2020-

The Department of Philosophy and the Department of Biochemistry and Molecular Biology

**EDUCATION**

**PhD** in Philosophy, University of Calgary, Canada Awarded in 2020

Dissertation Title: *Biological Lineages in Philosophical Focus*

Abstract: Lineages are sequences of genes, organisms, or species having parent-offspring relations. These sequences are important in many areas of biology, such as population genetics, systematics, and oncology. Biologists often treat lineages in contradictory ways, which leads to unexplored philosophical questions about the nature of reality and how science works. First, do lineages have a single set of defining features in biology? I propose *lineage pluralism* – the thesis that lineages have no single unified nature. Second, why do biologists use ambiguous language and oversimplified representations when talking about lineages? I show that these ambiguities and oversimplifications are *virtues* *rather than vices* in biology. They contribute to the social interaction among biologists and, thus, make biology a fundamentally social activity.

*Committee*: Matthew Haber (Utah), Marc Ereshefsky (supervisor, Calgary), Kenneth C. Waters (Calgary), Megan Delahanty (Calgary), Jason Anderson (Veterinary, Calgary), Thomas Reydon (Hannover)

**M.A** in Philosophy, Federal University of Minas Gerais, Brazil. Awarded in 2013

**B.A** in Philosophy, Federal University of Minas Gerais, Brazil. Awarded in 2009

**Licenciatura** in Philosophy, Federal University of Minas Gerais, Brazil. Awarded in 2006

**PUBLICATIONS**

**Peer-review**

(2020) “When Imprecision is a Good Thing, or How Imprecise Concepts Facilitate Integration in Biology” *Biology & Philosophy* 35, 58 https://doi.org/10.1007/s10539-020-09774-y

(2019) “What is a Lineage?” *Philosophy of Science* 86(5) 1099-1110.

(2016) “Rethinking Species Cohesion and Individuality” *Biological Theory 11*(3), 138-149.

(2012) “Individuals or Natural Kinds? On David Hull’s account of the metaphysics of species” in: Revista *Rumos da Epistemologia, vol.11, 219-234*. (*In Portuguese*)

(2011) “Questioning the role of species cohesion in David Hull’s species-as-individuals thesis” in: *História e Filosofia da Biologia*, 6 (2), 189-209. (*In Portuguese*)

**Proceedings**

(2012) “Molecular Biology, Reductionism, and Multiple Realizability” In: *Anais do Segundo Colóquio Internacional do NEPC,* BH, Brazil (*In Portuguese*)

**Translations**

(2014) Translation from German to Portuguese: Hoyningen-Huene, P and Oberheim, E. “Neues zu Feyeabend”. In: Abrahao, L. (ed.) (2014) Kuhn, Feyerabend e incomensurabilidade. Unisinos.

**Work-in-Progress** (*selected*)

From Idealization to Social Practices in Science: The case of Phylogenetic Trees (Under Review)

A Chemostat Model for Evolution by Persistence, and Its Relevance to Clade Selection (Under Review) – co-authored with Ford Doolittle

What Is It that Evolves? (draft upon request)

The Metaphysics of Race meets Inductive Risk (in preparation)

**AWARDS**

German Research Foundation Postdoctoral, Bielefeld University, $102,000 EUR (*declined*) 2020-2023

Izaak Walton Killiam Memorial Scholarship, University of Calgary, $60,000 CAD 2019-2021

Izaak Walton Killiam Research Scholarship, University of Calgary, $6,000 CAD 2019-2021

Silver Anniversary Graduate Scholarship, University of Calgary, $20,000 CAD 2018

Eyes High Doctoral Scholarship, University of Calgary, $3,500 CAD 2018

The Graduate College Scholarship, University of Calgary, $4,500 CAD 2016-2019

Philosophy Graduate Essay Prize, University of Calgary, $2,500 CAD 2018

Academic Project Support Grant, University of Calgary, $1,500 CAD 2017

Templeton Foundation Stipend, University of Minnesota, $3,500 CAD 2017

FGS Travel Award, University of Calgary, $1,000 CAD 2017

DAAD/CAPES/CNPq Brazil-Germany Doctoral scholarship, $36,000 EUR 2014-2016

DAAD German Winterkurs Scholarship, Duisburg-Essen University, $2,000 EUR 2012

CNPq M.A Scholarship, Federal University of Minas Gerais, $28,000 BRL 2011-2013

**SELECTED PRESENTATIONS**

*What Is It that Evolves? (invited talk)*

Digital Seminar Talk Series, Lisbon University, April 2021

*The Metaphysics of Race meets Inductive Risk: Challenging the New Biological Race Realism*

Ancestry Workshop, University of Pittsburgh, January 2021

Department of Philosophy, University of Calgary, January 2021 *(invited talk)*

*When Imprecision is a Good Thing (invited talk)*

Department of Philosophy, Dalhousie University, October 2020

*Rethinking the Use of Idealization in Scientific Practice: The case of Phylogenetic Trees*

Philosophy of Biology at the Mountains, University of Utah, June 2020

*There is no Tree of Life – Long Live the Tree of Life (invited talk)*

The Apeiron Society for the Practice of Philosophy, Calgary, January 2020

*The Evolution of Multicellularity and Lineage Pluralism*

International Society of History, Philosophy and Social Sciences of Biology, Oslo, July 2019

*What is a Lineage?*

American Philosophical Association Pacific Division, Vancouver, April 2019

Philosophy of Science Association, Seattle, November 2018

Western Canadian Philosophical Association, Calgary, October 2018

*Species Cohesion at the Age of Discordance*

International Society of History, Philosophy and Social Sciences of Biology, Sao Paulo, July 2017

Species in the Age of Discordance Conference, University of Utah, March 2017 *(invited talk)*

*Genealogy and Evolvability*

Philosophy of Science Association, Atlanta, November 2016

Philosophy of Biology at Madison, University of Wisconsin-Maddison, May 2016

*Lineages as Units of Evolvability*

International Society of History, Philosophy and Social Sciences of Biology, Montreal, July 2015

*Lineages and Identity: a critique of de Queiroz's solution to the Species Problem*

Congress of Logic Methodology and Philosophy of Science, Helsinki, August 2015

International Society of History, Philosophy and Social Sciences of Biology, Montreal, July 2015

*Cohesion and The Individuality Thesis*

International Society of History, Philosophy and Social Studies of Biology, Montpellier July 2013

**RESEARCH EXPERIENCE**

Research Assistant for Prof. Marc Ereshefsky, University of Calgary 2016-2017/2019/2020

Participant, Vendler Group Philosophy of Language Workshops, University of Calgary 2016-2019

Participant, Philosophy of Race Discussion Group, University of Calgary 2018

Participant, Philosophy of Paleontology Workshop at Provincial Park, Canada 2017

Participant, From Biological Practice to Scientific Metaphysics Summer School, Canada 2017

Participant, Biological Individuality Discussion Group, University of Calgary 2016

PhD Researcher, Leibniz Universitaet Hannover, Germany 2014-2016

Participant, Individuality in the Life Sciences Interdisciplinary Workshop, Germany 2015

Commentator, European Advanced Seminar in The Philosophy of the Life Sciences, Austria 2014

Undergraduate Research Exchange, Universitaet des Saarlandes, Germany 2008-2009

**TEACHING APPOINTMENTS**

Environmental Ethics (*scheduled*) Winter 2022

Instructor – Dalhousie University

The Philosophy of Race PHIL 399 Spring 2019

Instructor – University of Calgary

Mind and World (Metaphysics) PHIL395 Fall 2018

Teaching Assistant – University of Calgary

Information Technology Ethics PHIL314 Spring 2018

Instructor – University of Calgary

Mind, Matter and God (Metaphysics and Philosophy of Mind) PHIL201 Winter 2018

Teaching Assistant – University of Calgary

Introduction to Woman’s Studies WMST201 Winter 2017

Teaching Assistant – University of Calgary

Introduction to Philosophy of Science Spring 2013

Instructor - Federal Institute of Minas Gerais, Brazil

Scientific Methods (Introduction to research problems and project writing) Spring 2013

Instructor - Federal Institute of Minas Gerais, Brazil

Introduction to Sociology Spring 2013

High School Teacher - Federal Institute of Minas Gerais, Brazil

Introduction to Philosophy of Biology 2012-2013

Co-Instructor - Federal University of Minas Gerais, Brazil.

Introduction to Philosophy Fall 2010

High School Teacher - E.E. Nilo Maurício, Brazil

**TEACHING-RELATED EXPERIENCE AND PROFESSIONAL DEVELOPMENT**

Speaker at the Philosophy Writing Workshops, University of Calgary 2020-2019

Academic tutor in Doctoral Scholarship Proposal Writing, University of Calgary 2019

Adjudicator in Teaching Awards competition, University of Calgary 2019

Scholarship of Teaching and Learning (SoTL) Development Program, University of Calgary 2018

RWRD Program: Writing development Program, University of Calgary 2017

Graduate Student Teaching Development Program, University of Calgary 2016

Philosophy Exams Developer, Instituto Avaliar 2013

(elaborating philosophy tests to Brazilian high schools)

**PROFESSIONAL SERVICE**

Program Committee Member at the International Society of History, Philosophy

and Social Studies of Biology 2021

Member of the Climate and Diversity Committee in the University of Calgary Philosophy Dept 2020

Referee for the University of Calgary Graduate Philosophy Conference 2019-2020

Director of the Philosophy of Science Journal Club, University of Calgary 2017-2019

Student Representative in the University of Calgary Philosophy Department 2018-2019

Student Representative at the International Society of History, Philosophy

and Social Studies of Biology 2017-2019

Director of the Graduate Colloquium Seminar, University of Calgary 2017-2018

Director of the Annual Graduate Conference, University of Calgary 2018

Organizer of The Annual Graduate Conference, University of Calgary 2017

Organizer of Darwin International Conference, Federal University of Minas Gerais 2013

Administrator at NEPC, Federal University of Minas Gerais 2009

**REFEREE SERVICE**

*Biology and Philosophy*

*Studies in History and Philosophy of Biology & Biomedical Sciences*

*Ecology and Evolution*

**PROFESSIONAL AFFILIATIONS**

*American Philosophical Association*

*Philosophy of Science Association*

*International Society of History, Philosophy and Social Studies of Biology*

**LANGUAGES**

English (fluent), German (fluent), Portuguese (native), and Spanish (reading and conversation)

**REFERENCES**

1. Marc Ereshefsky (University of Calgary):

Department of Philosophy, University of Calgary, Calgary, Alberta T2N 1N4
Canada. Email: ereshefs@ucalgary.ca

1. Matthew Haber (University of Utah):

Department of Philosophy, University of Utah, Salt Lake City, UT84112

Email: matt.haber@utah.edu

1. Thomas Reydon (Leibniz Universität Hannover):

Institute of Philosophy, Leibniz Universität Hannover, 30167 Hannover, Germany.

Email: reydon@ww.uni-hannover.de

1. C. Kenneth Waters (University of Calgary):

Department of Philosophy, University of Calgary, Calgary, Alberta T2N 1N4
Canada. Email: cwaters@ucalgary.ca

1. Megan Delahanty (University of Calgary)

Department of Philosophy, University of Calgary, Calgary, Alberta T2N 1N4
Canada. Email: mdelahan@ucalgary.ca

1. Ford Doolittle (Dalhousie University)

Department of Biochemistry and Molecular Biology, Dalhousie University, Halifax, Nova Scotia B3H 4R2, Canada. Email: ford@dal.ca

1. Letitia Meynell (Dalhousie University)

Department of Philosophy, Dalhousie University, Halifax, Nova Scotia B3H 4R2, Canada.

Email: Letitia.meynell@dal.ca