

ZHIXIANG CHENG
CURRICULUM VITAE

CONTACT

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EDUCATION

2017-2022: University of Toronto, Canada

Ph.D. in philosophy of science, Institute for the History and Philosophy of Science and Technology (IHPST)

Dissertation (Defended in June 2022): On the explanatory and interpretative functions of mathematical models in population biology

- Supervisor: Denis M. Walsh

2014-2017: Peking University, China

M. A. in Philosophy of Science and Technology, Department of Philosophy

2010-2014: Peking University, China

B. A. in Philosophy, Department of Philosophy

B. A. in Economics, National School of Development

INTERESTS

Area of Specialization (AOS): History and Philosophy of biology, especially the topic of scientific explanation in evolutionary biology and population genetics, and the history of Modern Synthesis.

Area of Competence (AOC): General philosophy of science; philosophy of technology; intellectual history of early modern science.

ACADEMIC EXPERIENCE

Publications

(2022). The Shadow of “the Eclipse of Darwinism”: The Problem of Evolutionary Mechanisms in Republican China, 1910s-1930s, *Theory in Biosciences*,

<https://doi.org/10.1007/s12064-022-00378-6>

(2021)¹. 内幕政治性技术:对温纳旧概念的新释. *自然辩证法通讯* (02),39-45.

(2019). 何谓技术工具论:含义与分类. *科学技术哲学研究* (04),75-81.

Research in progress

Fisher's "fundamental theorem of natural selection" as a product of an ideal "interpretative model". *Biology and Philosophy* (Paper under review)

Carving a space for China's computer amateurs: CFido as a cyberspace before the Internet (Paper under review; as the third author, in cooperation with Chen-Pang Yeang and Wen-Ching Sung)

Distinctively mathematical explanations and a weak pragmatic account of explanatory irrelevance. (Paper in progress)

Talks

"Carving a Space for China's Computer Amateurs: CFido as a Chinese Cyberspace before the Internet"

- *EASST/4S Annual Meeting* (online), University of Toronto, August 2020.

"The explanatory power of natural selection and a weak pragmatic account for explanatory (ir)relevance"

- *IHPST Graduate Workshop*, University of Toronto, January 2020.

Teaching Assistant

HPS100H1S: Introduction to History and Philosophy of Science and Technology, 2022/01-2022/04

HPS/MAT390H1: The Story of Number: Mathematics from the Babylonians to the Scientific Revolution, 2021/09-2021/12:

HPS391H1-S: Rebels Who Count: The History of Mathematics from 1700 to the Present, 2021/01-2021/04

JHE353H1-F: History of Evolutionary Biology I, 2020/09-2020/12

¹ Note the two articles in Chinese are based on my earlier M.A. thesis. They do not reflect the primary research focus of my Ph.D. work.

HPS120H1: How to Think about Science, 2020/01-2020/04

JHE353H1-F: History of Evolutionary Biology I, 2018/09-2018/12

HPS250H1-F: Introduction to the Philosophy of Science, 2017/09-2017/12

Research Assistant

2019-now: Research assistant for Chen-Pang Yeang on the project of “Innovation from Below: Technological Enthusiasm and Improvisational Entrepreneurship in Information Technology, US and China” (SSHRC Insight Development Grant).

HONORS AND AWARDS (Selected)

(2022) IHPST Academic Achievement Award, University of Toronto

(2021) Doctoral Completion Award, University of Toronto

(2015) The May 4th scholarship, Peking University

(2013) Leo koGuan Scholarship, Peking University

(2011) National Scholarship for Undergraduates, Peking University