

Patrick Landon Ferree

Medical Museion, Fredericiagade 18, Copenhagen K, Denmark • patrick.ferree@sund.ku.dk • +45 93 86 71 37

SUMMARY

I am a PhD student at the University of Copenhagen studying history and philosophy of science. I am located at Medical Museion (a medical history museum) and the Center for Basic Metabolic Research. I have a background in chemistry and philosophy, a PhD in cell biology, and postdoc experience in exposure science. My areas of research include history of 20th-century biomedical sciences, philosophy of experimentation, and philosophy of method/tool development.

EDUCATION

University of Copenhagen PhD Student in History and Philosophy of Science – Program in Medicine, Culture, and Society	Copenhagen, DK in Progress
Duke University School of Medicine PhD in Cell Biology – Program in Cell and Molecular Biology • Dissertation: Temporal regulation of cell divisions in the embryo of <i>Drosophila melanogaster</i> • Committee: Stefano Di Talia, Michel Bagnat, Danny Lew, Bernard Mathey-Prevot, Nick Buchler	Durham, NC, USA Apr 2022
University of California, San Diego BS in Chemistry, BA in Philosophy, Minor in Political Science, <i>magna cum laude</i>	La Jolla, CA, USA Jun 2012

EXPERIENCE

University of Copenhagen Graduate Student Researcher, Advisor: Karin Tybjerg, PhD • Affiliation: Medical Museion, Department of Public Health • Affiliation: Novo Nordisk Foundation Center for Basic Metabolic Research (CBMR) • Co-Advisor: Sara Green, PhD, History and Philosophy of Science, Department of Science Education • Research: History of modern biomedical sciences	Copenhagen, DK Mar 2024 - Present
The National Research Centre for the Working Environment Postdoctoral Researcher, Advisor: Keld Alstrup Jensen, PhD • Research: Occupational exposure science; chemistry and physics of airborne particles	Copenhagen, DK Jun 2022 - Mar 2024
Duke University School of Medicine, Department of Cell Biology Graduate Student Researcher, Advisor: Stefano Di Talia, PhD • Research: Cell cycle regulation in the early fly embryo	Durham, NC, USA Sep 2014 - Apr 2022
University of Texas, El Paso, Department of Psychology Research Technician, Advisor: Laura O'Dell, PhD • Research: Neuroscience of drug addiction in rats	El Paso, TX, USA Jan 2013 - Sep 2014
Scripps Institute of Oceanography Undergraduate Researcher, Advisor: Lynn Russell, PhD • Research: Chemistry and physics of atmospheric aerosols	La Jolla, CA, USA Jan - Sep 2012

MANUSCRIPTS IN PROGRESS

- P. L. Ferree**, M. Polat, J. K. Nøjgaard, K. A. Jensen, “Airborne particulate matter and diesel engine exhaust on infrastructure construction sites in the Copenhagen metropolitan area” (**Article - in Revision**).
- P. L. Ferree**, C. Ribalta, A. CØ Jensen, A. Brostrøm, T. Berthing, K. A. Jensen, “Airborne nano/microplastics in the plastics recycling and manufacturing industry” (**Article - in Preparation**).
- P. L. Ferree**, S. Brantley, T. Starr, A. Chao, S. Di Talia, “Activator-accumulation and repressor-depletion time mitosis during *Drosophila* gastrulation” (**Article - in Preparation**).

SCIENCE PUBLICATIONS

P. L. Ferree, M. Xing, J.Q. Zhang, S. Di Talia, “Structure-function analysis of Cdc25 Twine degradation at the Drosophila maternal-to-zygotic transition”, *Fly*, vol. 16, no. 1, pp. 111–117, Dec. 2022, ISSN: 1933-6934 (**Article**).

P. L. Ferree, S. Di Talia, “Developmental Biology: Embryos Need to Control Their Nucleotides Just Right”, *Current Biology*, vol. 29, no. 7, R252–R254, Apr. 2019, ISSN: 09609822 (**Preview**).

P. L. Ferree, S. Di Talia, “Chemical Waves in Embryonic Cell Cycles”, *Israel Journal of Chemistry*, vol. 58, no. 6, pp. 714–721, 2018, ISSN: 18695868 (**Review**).

P. L. Ferree, S. Di Talia, “For Embryos, Mother Can Only Take You So Far”, *Developmental Cell*, vol. 42, no. 3, pp. 203–205, 2017, ISSN: 18781551 (**Preview**).

P. L. Ferree, V. Deneke, S. Di Talia, “Measuring time during early embryonic development”, *Seminars in Cell and Developmental Biology*, 2016, ISSN: 10849521 (**Review**).

L. M. Carcoba, J. E. Orfila, L. E. Natividad, O. V. Torres, J. A. Pipkin, **P. L. Ferree**, E. Castañeda, D. E. Moss, L. E. O’Dell, “Cholinergic transmission during nicotine withdrawal is influenced by age and pre-exposure to nicotine: Implications for teenage smoking”, *Dev Neuroscience*, vol. 36, no. 3-4, pp. 347–355, 2014, ISSN: 14219859 (**Article**).

O. V. Torres, J. A. Pipkin, **P. L. Ferree**, L. M. Carcoba, L. E. O’Dell, “Nicotine withdrawal increases stress-associated genes in the nucleus accumbens of female rats in a hormone-dependent manner”, *Nicotine and Tobacco Research*, vol. 17, no. 4, pp. 422–430, 2014, ISSN: 1469994X (**Article**).

SELECT TALKS AND POSTER PRESENTATIONS

P. L. Ferree, K. Tybjerg, “Technical and epistemic objects in cell-type classification: A study of single-cell sequencing platforms”, Society for Philosophy of Science in Practice, Columbus, SC, USA, May 2024 (**Poster**).

P. L. Ferree, C. Ribalta, A. Jensen, J. K. Nøjgaard, S. Nielsen, N. Sahlgren, T. Berthing, K. A. Jensen, “Workplace exposure to ultrafine particles, chemicals, and dust during plastic production with recycled plastics”, British Occupational Hygiene Society: Inhaled Particles and NanOEh, Manchester, UK, May 2023 (**Talk**).

P. L. Ferree, A. De Simone, S. Di Talia, “An activator-repressor model for improved temporal precision of transcription”, Quantitative Biology (Q-Bio), Oahu, HI, USA, Feb. 2019 (**Talk**).

P. L. Ferree, C. Bunce, “The Questions of Developmental Biology”, The Society for Developmental Biology (SDB), Boston, MA, USA, July 2019 (**Poster**).

P. L. Ferree, A. De Simone, S. Di Talia, “An activator-repressor model for improved temporal precision of transcription”, Tissue Self-Organization: Challenging the Systems, Heidelberg, Germany, March 2018 (**Poster**).

SELECT SCHOOLS AND WORKSHOPS ATTENDED AS A STUDENT

Summer School on the History of Knowledge, Lund University (LUCK), Sweden, Aug 2024.

Conference: Crossing the Disciplinary Boundaries of Physics, Bohr Centennial, Copenhagen, Denmark, August 2023.

Workshop on Methods in the Philosophy of Science, University of Vienna, Austria, May 2023.

Summer School on the History of the Life Sciences, Ischia, Italy, June 2022.

Winter School on Quantitative Biology, International Center for Theoretical Physics, Trieste, Italy, December 2017.

ACADEMIC SOCIETIES

Member, International Society for the History, Philosophy, and Social Studies of Biology, 2024-present.

Member, Society for Philosophy of Science in Practice, 2023-present.

Member, History of Science Society, 2024-present.

REFERENCES

Karin Tybjerg, PhD

Associate Professor, Medical Museion, University of Copenhagen

Email: karin.tybjerg@sund.ku.dk, Phone: +45 35 32 38 03

Sara Green, PhD

Associate Professor, History and Philosophy of Science, University of Copenhagen

Email: sara.green@ind.ku.dk, Phone: +45 35 33 46 32

Keld Alstrup Jensen, PhD

Professor, Chemistry and Microbiology, National Research Centre for the Working Environment

Email: kaj@nfa.dk, Phone: +45 20 76 47 31

Stefano Di Talia, PhD

Associate Professor, Department of Cell Biology, Duke University

Email: stefano.ditalia@duke.edu, Phone: +1 919 684 8079