Patrick Landon Ferree, Ph.D.

Research Interests

Areas of Specialization

Philosophy, Sociology, and History of Biomedical Knowledge • Science and Technology Studies

Areas of Competence

History of Philosophy of Science • Social and Political Theory • Bioethics

EDUCATION

University of Copenhagen Copenhagen, DK Ph.D. in Science Studies (in Progress) Starting 1 March 2024 **Duke University** Durham, NC, USA Ph.D. in Cell Biology April 2022 • Dissertation: Temporal regulation of cell divisions in the embryo of *Drosophila melanogaster* • Committee: Stefano Di Talia, Michel Bagnat, Danny Lew, Bernard Mathey-Prevot, Nick Buchler

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Committee: Stefano Di Talia, Michel Bagnat, Danny Lew, Bernard Mathey-Prevot, Nick Buchler	
University of California, San Diego B.A. in Philosophy, B.S. in Chemistry, Minor in Political Science, magna cum laude	La Jolla, CA, USA June 2012
Experience	
 University of Copenhagen Graduate Student Researcher, Advisor: Karin Tybjerg, Ph.D. Affiliation: Programme in Medicine, Culture, and Society Affiliation: Medical Museion, Department of Public Health, Faculty of Health and Medical Sciences Affiliation: Novo Nordisk Foundation Centre for Basic Metabolic Research Research: Philosophy, sociology, and history of technology platforms in biomedical research centres 	Copenhagen, DK Starting 2024
 The National Research Centre for the Working Environment Postdoctoral Researcher, Advisor: Keld Alstrup Jensen, Ph.D. Affiliation: Section for Chemistry and Microbiology Research: Exposure science; chemistry and physics of airborne particles in workplace environments 	Copenhagen, DK June 2022-present
Copenhagen Institute for Futures Studies Junior Health Associate, Advisor: Bogi Eliasen • Research: Futures of healthcare and biomedicine	Copenhagen, DK January-June 2022
 Duke University Graduate Student Researcher, Advisor: Stefano Di Talia, Ph.D. Affiliation: Department of Cell Biology, School of Medicine Affiliation: Program in Cell and Molecular Biology Research: Cell cycle regulation in the early fly embryo 	Durham, NC, USA 2014-2022
 University of Texas, El Paso Research Technician, Advisor: Laura O'Dell, Ph.D. Affiliation: Department of Psychology Research: Neuroscience of drug addiction in rats 	El Paso, TX, USA 2012-2014
Scripps Institute of Oceanography Undergraduate Researcher, Advisor: Lynn Russell, Ph.D. • Affiliation: Aerosol Research Group	La Jolla, CA, USA 2012

• Research: Chemistry and physics of atmospheric aerosols

Manuscripts in progress

- P. L. Ferree, M. Polat, J. K. Nøjgaard, K. A. Jensen, "A study of airborne particulate matter and diesel engine exhaust on infrastructure construction sites in the Copenhagen metropolitan area" (Submitted).
- P. L. Ferree, C. Ribalta, A. CØ 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".
- P. L. Ferree, S. Brantley, T. Starr, A. Chao, S. Di Talia, "Activatror and repressor dynamics time mitosis during *Drosophila* gastrulation".

PUBLICATIONS

- [1] **P. L. Ferree**, "Temporal regulation of cell divisions in the embryo of Drosophila melanogaster", Ph.D. dissertation, Duke University, 2022.
- [2] **P. L. Ferree**, M. Xing, J. Q. Zhang, and 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.
- [3] P. L. Ferree and 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.
- [4] P. L. Ferree and S. Di Talia, "Chemical Waves in Embryonic Cell Cycles", Israel Journal of Chemistry, vol. 58, no. 6, pp. 714–721, 2018, ISSN: 18695868.
- [5] P. L. Ferree and S. Di Talia, "For Embryos, Mother Can Only Take You So Far", Developmental Cell, vol. 42, no. 3, pp. 203–205, 2017, ISSN: 18781551.
- [6] P. L. Ferree, V. E. Deneke, and S. Di Talia, "Measuring time during early embryonic development", Seminars in Cell & Developmental Biology, 2016, ISSN: 10849521.
- [7] L. M. Carcoba, J. E. Orfila, L. A. Natividad, O. V. Torres, J. A. Pipkin, **P. L. Ferree**, E. Castañeda, D. E. Moss, and L. E. O'Dell, "Cholinergic transmission during nicotine withdrawal is influenced by age and pre-exposure to nicotine: Implications for teenage smoking", *Dev. Neurosci.*, vol. 36, no. 3-4, pp. 347–355, 2014, ISSN: 14219859.
- [8] O. V. Torres, J. A. Pipkin, **P. L. Ferree**, L. M. Carcoba, and 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.

Select Talks and Poster Presentations

- 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**).
- **P. L. Ferree**, A. Momen-Roknabadi, S. Di Talia, "Precise timing of mitosis during *Drosophila* gastrulation", Winter School on Quantitative Biology, International Center for Theoretical Physics, Trieste, Italy, Dec. 2017 (**Poster**.)

Select Schools and Workshops Attended as a Student

Crossing the Disciplinary Boundaries of Physics, Bohr Centennial, Copenhagen, Denmark, August 2023. Three days of presentations on the history of physics and its impact on other sciences, especially biology.

Workshop on Methods in the Philosophy of Science, Vienna, Austria, May 2023. Two days of presentations and discussions on contemporary methods in philosophy of science.

Summer School on the History of the Life Sciences, Ischia, Italy, June 2022. One week of presentations and discussions on the theme of kinship and other relations in biology.

Winter School on Quantitative Biology, International Center for Theoretical Physics, Trieste, Italy, December 2017. Two weeks of pedagogical lectures, presentations, and discussions between physicists and biologists.

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, Danish Association for Science and Technology Studies, 2024-present.

Member, The Richard Rorty Society, 2019-present.

REFERENCES

Karin Tybjerg, Ph.D.

Associate Professor, Medical Museion, University of Copenhagen Relationship: Ph.D. advisor, Email: karin.tybjerg@sund.ku.dk, Phone: +45 35 32 38 03

Keld Alstrup Jensen, Ph.D.

Professor, National Research Centre for the Working Environment Relationship: Postdoc advisor, Email: kaj@nfa.dk, Phone: +45 20 76 47 31

Stefano Di Talia, Ph.D.

Associate Professor of Cell Biology, Duke University

Relationship: Ph.D. advisor, Email: stefano.ditalia@duke.edu, Phone: +1 919 684 8079

Sara Green, Ph.D.

Associate Professor of History and Philosophy of Science, University of Copenhagen Email: sara.green@ind.ku.dk, Phone: +45 35 33 46 32

Joeri Witteveen, Ph.D.

Associate Professor of History and Philosophy of Science, University of Copenhagen Email: jw@ind.ku.dk, Phone: +45 35 33 04 67