

Patrick Landon Ferree

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RESEARCH

AOS: Philosophy of Science, Philosophy of Measurement, History and Philosophy of Biology and Biomedicine

AOC: Philosophy of Technology, Science and Technology Studies, History of Philosophy

EDUCATION

University of Copenhagen Copenhagen, DK
PhD Student in Philosophy of Science in Progress

Duke University School of Medicine Durham, NC, USA
PhD in Cell Biology – Certificate in Cell and Molecular Biology Apr 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

University of California, San Diego La Jolla, CA, USA
BA in Philosophy, BS in Chemistry, Minor in Political Science, *magna cum laude* Jun 2012

EXPERIENCE

University of Copenhagen Copenhagen, DK
Graduate Student Researcher, Advisors: Karin Tybjerg & Sara Green Mar 2024 - Present
• Affiliation: Medical Museion, Department of Public Health; Program in Medicine, Culture, and Society
• Affiliation: Novo Nordisk Foundation Center for Basic Metabolic Research (CBMR)
• Member: Center for Medical Science and Technology Studies (MeST)
• Research: Philosophy of measurement and modeling in the biomedical sciences

The National Research Centre for the Working Environment Copenhagen, DK
Postdoctoral Researcher, Advisor: Keld Alstrup Jensen Jun 2022 - Mar 2024
• Research: Occupational exposure science; chemistry and physics of airborne particles

Duke University School of Medicine, Department of Cell Biology Durham, NC, USA
Graduate Student Researcher, Advisor: Stefano Di Talia Sep 2014 - Apr 2022
• Research: Developmental biology; cell-cycle regulation in the early fly embryo

University of Texas, El Paso, Department of Psychology El Paso, TX, USA
Research Technician, Advisor: Laura O'Dell Jan 2013 - Sep 2014
• Research: Neuroscience of drug addiction in rats

Scripps Institute of Oceanography La Jolla, CA, USA
Undergraduate Researcher, Advisor: Lynn Russell Jan - Sep 2012
• Research: Chemistry and physics of atmospheric aerosols

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, “Technical and epistemic objects in cell-type classification: A study of single-cell sequencing”, Society for Philosophy of Science in Practice (SPSP), Columbia, 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, Jul 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, Mar 2018 (**Poster**).

SELECT SCHOOLS AND WORKSHOPS ATTENDED AS A STUDENT

Summer School on the Philosophy of the Life Sciences, Konrad Lorenz Institute, Austria, Sep 2024.

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

Conference: Crossing the Disciplinary Boundaries of Physics, Bohr Centennial, Copenhagen, Denmark, Aug 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, Jun 2022.

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

ACADEMIC SOCIETIES

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

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

Member, History of Science Society, 2024-present.

Member, The Richard Rorty Society, 2019-present.

REFERENCES

Karin Tybjerg, PhD

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Sara Green, PhD

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

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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