Patrick Landon Ferree

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Profile

Areas of Specialization
Philosophy of Science, Philosophy of Biology

Areas of Competence
Philosophy of Medicine, Philosophy of Technology

Education

University of Copenhagen — Copenhagen, DK
PhD Student in Philosophy of Science – Graduate Program in Medicine, Culture, and Society — in Progress
- Project: *Making up cells: Philosophical and social studies of single-cell biology*
- Advisors: Karin Tybjerg & Sara Green

Duke University School of Medicine — Durham, NC, USA
PhD in Cell Biology – Graduate Program 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
PhD Student, Advisors: Karin Tybjerg & Sara Green — Mar 2024 - Present
- Affiliation: Medical Museion, Department of Public Health, Faculty of Medical and Health Sciences
- Affiliation: Center for Medical Science and Technology Studies (MeST)
- Affiliation: Novo Nordisk Foundation Center for Basic Metabolic Research (CBMR)
- Research: Philosophy and ethnography of 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 to airborne particles

Duke University School of Medicine — Durham, NC, USA
PhD Student, Advisor: Stefano Di Talia — Sep 2014 - Apr 2022
- Affiliation: Department of Cell Biology
- Research: Temporal regulation of the cell cycle in fly embryos

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

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

Papers

Articles

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", *Annals of Work Exposures and Health*, Volume 68, Issue 8, Oct. 2024, Pages 791–803, https://doi.org/10.1093/annweh/wxae062.

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.

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", *Developmental Neuroscience*, vol. 36, no. 3-4, pp. 347–355, 2014, ISSN: 14219859.

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.

Reviews

P. L. Ferree, "A History of Genomics Across Species, Communities and Projects", *New Genetics and Society*, 44 (1), e2500749, May 2025, https://doi.org/10.1080/14636778.2025.2500749 (**Book review**).

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 (**Commentary**).

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 (**Commentary**).

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

Manuscripts

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**).

Presentations

Talks

"From clocks to hourglasses: Making time an epistemic object in developmental biology", International Society for the History, Philosophy, and Social Studies of Biology (ISHPSSB), Porto, Portugal, July 2025. Part of an organized symposium: *Time in Developmental Biology* (**Upcoming**).

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.

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.

Posters

"From experimental system to technological platform: The case of single-cell omics", International Society for the History, Philosophy, and Social Studies of Biology (ISHPSSB), Porto, Portugal, July 2025 (**Upcoming**).

"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.

P. L. Ferree, C. Bunce, "The Questions of Developmental Biology", The Society for Developmental Biology (SDB), Boston, MA, USA, Jul 2019.

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.

Schools and Workshops Attended as a Student

Summer School for Philosophy in Biology and Medicine (PhilInBioMed), University of Bordeaux, France, Jun 2025.

European Advanced School for 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.

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.

Teaching

Lecturer, Philosophy of Science for Medical Engineers, University of Copenhagen, Winter 2025 (with Karin Tybjerg).

Guest Lecturer, Creative Processes for Academic Writing, University of Copenhagen, 2024-2025 (with Tine Friis).

Teaching Assistant, Responsible Conduct of Research (RCR), Duke University, Summer 2018 (with Duke faculty).

Societies

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

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

Service to the Community

Member of Editorial Team, Society for Philosophy of Science in Practice Newsletter, 2024-present.

Interviews

"Practices of Validation in the Biomedical Sciences: Interview with Lara Keuck", *SPSP Newsletter*, *22*, Nov 2024, (with Stefano Canali).

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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Professor, Chemistry and Microbiology, National Research Centre for the Working Environment
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Stefano Di Talia, PhD
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