

Patrick Landon Ferree

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RESEARCH AREAS

Specialization: Philosophy of science, technology, and biomedicine. **Competence:** History of biomedicine.

EDUCATION

University of Copenhagen

PhD Student, Medical Museion, Program in Medicine, Culture, and Society

- Project: *How technology shapes biomedical knowledge: A study of single-cell biology*
- Advisors: Karin Tybjerg & Sara Green

Copenhagen, DK
in Progress

Duke University School of Medicine

PhD, Department of Cell Biology, Program in Cell and Molecular Biology

- 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

Durham, NC, USA
Apr 2022

University of California, San Diego

BS in Chemistry, BA in Philosophy, Minor in Political Science, *magna cum laude*

La Jolla, CA, USA
Jun 2012

EXPERIENCE

University of Copenhagen

PhD Student, Advisors: Karin Tybjerg & Sara Green

- 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: Practice-based philosophy of technology in the biomedical sciences
- Methods: Ethnography, interviews, conceptual analysis

Copenhagen, DK
Mar 2024 - Present

The National Research Centre for the Working Environment

Postdoctoral Researcher, Advisor: Keld Alstrup Jensen

- Research: Occupational exposure to airborne particles
- Methods: Instrumental analysis, field campaigns, chamber studies

Copenhagen, DK
Jun 2022 - Mar 2024

Duke University School of Medicine

PhD Student, Advisor: Stefano Di Talia

- Affiliation: Department of Cell Biology
- Research: Genetic regulation of the cell cycle in fly embryos
- Methods: Quantitative *in vivo* confocal microscopy, computational analysis

Durham, NC, USA
Sep 2014 - Apr 2022

University of Texas, El Paso

Research Technician, Advisor: Laura O'Dell

- Affiliation: Department of Psychology
- Research: Neuroscience of drug addiction in rats
- Methods: Survival surgeries, behavioral tests, qPCR

El Paso, TX, USA
Jan 2013 - Sep 2014

Scripps Institute of Oceanography

Research Assistant, Advisor: Lynn Russell

- Research: Chemistry and physics of atmospheric aerosols
- Methods: IR spectroscopy

La Jolla, CA, USA
Jan - Sep 2012

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 - Draft available upon request**).

PRESENTATIONS

Talks

“From clocks to hourglasses: How studies of the cell cycle made timing a tractable problem 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*.

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

“An ethnographic and philosophical study of single-cell biology”, International Society for the History, Philosophy, and Social Studies of Biology (ISHPSSB), Porto, Portugal, July 2025.

“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.

SCHOOL AND WORKSHOP PARTICIPATION

Summer School on “Narratives of Disruption and Continuity in Science, Technology, and Society”, part of the DFG Research Training Group: Transformations of Science and Technology since 1800, Wuppertal, Germany, Sep 2025.

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 Classification in Conservation Science: Interview with Joeri Witteveen”, *SPSP Newsletter*, 23, Jun 2025.

“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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Keld Alstrup Jensen, PhD

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

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Stefano Di Talia, PhD

Professor, Department of Cell Biology, Duke University

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