

Patrick Landon Ferree

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RESEARCH AREAS

History and Philosophy of the Biomedical Sciences

EDUCATION

University of Copenhagen

PhD Student in Medicine, Culture, and Society

Copenhagen, DK
in Progress

Duke University School of Medicine

PhD in Cell Biology, Certificate in Cell and Molecular Biology

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, Advisor: Karin Tybjerg; Co-advisor: Sara Green

Copenhagen, DK
Mar 2024 - Present

- Affiliation: Medical Museion and Center for Medical Science and Technology Studies (MeST), Department of Public Health; and Novo Nordisk Foundation Center for Basic Metabolic Research (CBMR), Faculty of Health and Medical Sciences
- External member: HPS of Biology and Health Sciences Research Group, Section for History and Philosophy of Science, Department of Science Education, Faculty of Science
- Research: History and philosophy of single-cell and spatial omics
- Methods: Ethnography, content analysis, thematic analysis

The National Research Centre for the Working Environment

Postdoctoral Researcher, Advisor: Keld Alstrup Jensen

Copenhagen, DK
Jun 2022 - Mar 2024

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

Duke University School of Medicine

PhD Student, Advisor: Stefano Di Talia

Durham, NC, USA
Sep 2014 - Apr 2022

- Affiliation: Department of Cell Biology
- Methods: Quantitative *in vivo* confocal microscopy, computational image analysis
- Dissertation: *Temporal regulation of cell divisions in the embryo of Drosophila melanogaster*
- Committee: Michel Bagnat, Danny Lew, Bernard Mathey-Prevot, Nick Buchler

University of Texas, El Paso

Research Technician, Advisor: Laura O'Dell

El Paso, TX, USA
Jan 2013 - Sep 2014

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

Scripps Institute of Oceanography

Research Assistant, Advisor: Lynn Russell

La Jolla, CA, USA
Jan - Sep 2012

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

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, 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 - Waiting on last experiments**).

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”, part of the organized symposium: *Time in Developmental Biology*, International Society for the History, Philosophy, and Social Studies of Biology (ISHPSSB), Porto, Portugal, July 2025.

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.

INTERVIEWS AND OTHER OUTPUTS

“Methods in the Philosophy of Science: Interview with Sophie Veigl and Adrian Currie”, *SPSP Newsletter*, 24, Nov 2025 (*forthcoming*).

“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).

SELECT 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

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

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

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

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.

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

SERVICES TO THE COMMUNITY

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

Reviewer, European Journal for Philosophy of Science

REFERENCES

Karin Tybjerg, PhD

Associate Professor, Medical Museion and CBMR, 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

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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

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