Patrick Landon Ferree

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SUMMARY

I am a PhD student at the University of Copenhagen studying history and philosophy of science. I am located at Medical Museion (a medical history museum) and the Center for Basic Metabolic Research. I have a background in chemistry and philosophy, a PhD in cell biology, and postdoc experience in exposure science. My areas of research include history of 20th-century biomedical sciences, chemistry, and instrumentation, as well as pragmatism and historical epistemology.

EDUCATION

| University of Copenhagen PhD Student in History and Philosophy of Science – Program in Medicine, Culture, and Society | Copenhagen, DK in Progress |
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| Duke University School of Medicine PhD in Cell Biology – Program in Cell and Molecular Biology Dissertation: Temporal regulation of cell divisions in the embryo of <i>Drosophila melanogaster</i> 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 Graduate Student Researcher, Advisor: Karin Tybjerg, PhD Affiliation: Medical Museion, Department of Public Health Affiliation: Novo Nordisk Foundation Center for Basic Metabolic Research (CBMR) Co-Advisor: Sara Green, PhD, History and Philosophy of Science, Department of Science Education Research: History of modern biomedical sciences | Copenhagen, DK Mar 2024 - Present |
| The National Research Centre for the Working Environment Postdoctoral Researcher, Advisor: Keld Alstrup Jensen, PhD Research: Occupational exposure science; chemistry and physics of airborne particles | Copenhagen, DK Jun 2022 - Mar 2024 |
| Duke University School of Medicine, Department of Cell Biology Graduate Student Researcher, Advisor: Stefano Di Talia, PhD Research: Cell cycle regulation in the early fly embryo | Durham, NC, USA Sep 2014 - Apr 2022 |
| University of Texas, El Paso, Department of Psychology Research Technician, Advisor: Laura O'Dell, PhD Research: Neuroscience of drug addiction in rats | El Paso, TX, USA Jan 2013 - Sep 2014 |
| Scripps Institute of Oceanography Undergraduate Researcher, Advisor: Lynn Russell, PhD Research: Chemistry and physics of atmospheric aerosols | La Jolla, CA, USA Jan - Sep 2012 |

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, K. Tybjerg, "Technical and epistemic objects in cell-type classification: A study of single-cell sequencing platforms", Society for Philosophy of Science in Practice, Columbus, 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, 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).

SELECT SCHOOLS AND WORKSHOPS ATTENDED AS A STUDENT

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

Conference: Crossing the Disciplinary Boundaries of Physics, Bohr Centennial, Copenhagen, Denmark, August 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, June 2022.

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

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, History of Science Society, 2024-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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Stefano Di Talia, PhD

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