Patrick Landon Ferree

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Areas of Specialization

OTHER EXPERTISE

Philosophy Science

History and Philosophy of Biology and Biomedicine (e.g., Metabolism Research)

Developmental Biology Exposure Science

EDUCATION

University of Copenhagen

Copenhagen, DK

PhD Student in History and 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 Mar 2024 - Present

PhD Student, Advisors: Karin Tybjerg & Sara Green

• Affiliation: Medical Museion, Department of Public Health

• Affiliation: Novo Nordisk Foundation Center for Basic Metabolic Research (CBMR)

• Member: Center for Medical Science and Technology Studies (MeST)

• Research: History and philosophy of the biomedical sciences

The National Research Centre for the Working Environment

Copenhagen, DK Jun 2022 - Mar 2024

Postdoctoral Researcher, Advisor: Keld Alstrup Jensen

• Research: Occupational exposure to airborne particles

Copenhagen Institute for Futures Studies

Copenhagen, DK Jan - Jun 2022

Intern, Advisor: Bogi Eliasen

• Research: Futures of healthcare and biomedicine

Duke University School of Medicine

Durham, NC, USA

PhD Student, Advisor: Stefano Di Talia

Sep 2014 - Apr 2022

• Affiliation: Department of Cell Biology

• Research: Developmental time and cell-cycle regulation in the early fly embryo

University of Texas, El Paso

El Paso, TX, USA

Research Technician, Advisor: Laura O'Dell

Jan 2013 - Sep 2014

Affiliation: Department of PsychologyResearch: Neuroscience of drug addiction in rats

Scripps Institute of Oceanography

La Jolla, CA, USA

Research Assistant, Advisor: Lynn Russell

Jan - Sep 2012

 $\bullet\,$ Research: Chemistry and physics of atmospheric aerosols

PUBLICATIONS

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*, 2024 (Article - Forthcoming).

- 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**).

Manuscripts in Progress

- 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 Draft available upon request).

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, Philosophy of Science Association, 2024-present.

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

Member, Society for the Study of Measurement, 2024-present.

Member, History of Science Society (HSS), 2024-present.

Member, The Richard Rorty Society, 2019-present.

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

Email: sara.green@ind.ku.dk, Phone: +45 35 33 46 32

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