

Stephan Guttinger

Address: CPNSS
London School of Economics
Lakatos Building, Houghton Street
London, WC2A 2AE
UK

E-mail: s.m.guttinger@lse.ac.uk

Education

2010	MSc in Philosophy of Science (with distinction) London School of Economics and Political Science, UK
2006 – 2009	Studies in Philosophy (BSc equivalent) University of Zürich, Switzerland
2006	Ph.D. in Biochemistry, Supervisor: Prof. Ulrike Kutay Swiss Federal Institute of Technology (ETH), Zürich, Switzerland
2002	Master of Science ETH (Biochemistry) Swiss Federal Institute of Technology (ETH), Zürich, Switzerland

Research positions

05/2018 –	Research associate, CPNSS, London School of Economics, UK
2014 – 04/2018	Research fellow, Egenis, University of Exeter, UK
2011 – 2014	Postdoctoral research fellow, London School of Economics, UK
2006 – 2009	Postdoctoral research fellow, Institute of Biochemistry Swiss Federal Institute of Technology (ETH), Zürich, Switzerland

Awards

2006	Medal of the ETH Zürich for outstanding PhD theses. Title of thesis: “Investigations into RNA export and NPC biogenesis”
------	---

Publication List

Philosophy:

1. Guttinger S. and Alan C. Love.
Characterizing scientific failure.
EMBO Reports, online first, e48765 (2019) DOI: [10.15252/embr.201948765](https://doi.org/10.15252/embr.201948765)
2. Guttinger S.
Editing the reactive genome: towards a postgenomic ethics of germline editing.
Journal of Applied Philosophy, online first (2019) DOI: [10.1111/japp.12367](https://doi.org/10.1111/japp.12367)

3. Guttinger S.
A new account of replication in the experimental life sciences.
Philosophy of Science, 86 (3), 453-471. (2019) DOI: [10.1086/703555](https://doi.org/10.1086/703555)
4. Guttinger S.
The anti-vaccination debate and the microbiome.
EMBO Reports, 20 (3), p.e47709 (2019) DOI: [10.15252/embr.201947709](https://doi.org/10.15252/embr.201947709)
5. Guttinger S.
Replications everywhere.
BioEssays, 40:1800055. (2018) DOI: [10.1002/bies.201800055](https://doi.org/10.1002/bies.201800055)
6. Guttinger S.
Trust in Science: CRISPR-Cas9 and the Ban on Human Germline Editing.
Science and Engineering Ethics, 24(4): 1077-1096. (2018)
Open Access: <https://link.springer.com/article/10.1007/s11948-017-9931-1>
7. Guttinger S.
A Process Ontology for Macromolecular Biology.
In Nicholson, D. J. & Dupré, J. (eds.), *Everything Flows: Towards a Processual Philosophy of Biology*. Oxford: Oxford University Press. (2018)
8. Guttinger S.
Riding the wave into a crispr future? (Essay review)
Studies in History and Philosophy of Biological and Biomedical Sciences, 67: 32-35.
(2017) DOI: [10.1016/j.shpsc.2017.12.001](https://doi.org/10.1016/j.shpsc.2017.12.001)
9. Guttinger S.
The Virome and the Anti-Vaccination Debate.
The Scientist, June (2017) [Article](#)
10. Guttinger S. and Dupré, J.
Genomics and Postgenomics.
The Stanford Encyclopedia of Philosophy, Edward N. Zalta (ed.) (2016)
<https://plato.stanford.edu/archives/win2016/entries/genomics/>
11. Dupré, J. and Guttinger S.
Viruses as living processes.
Studies in History and Philosophy of Biological and Biomedical Sciences, 59: 109-116.
(2016)
12. Guttinger S.
Creating parts that allow for rational design: synthetic biology and the problem of context-sensitivity.
Studies in History and Philosophy of Biological and Biomedical Sciences, 44(2): 199-207. (2013)

Life sciences (selected publications):

1. Guttinger, S., Laurell, E., Kutay, U.
Orchestrating nuclear envelope disassembly and reassembly during mitosis.
Nature Reviews Molecular Cell Biology, 10(3):178-91. (2009)
2. Guttinger, S., Mansfeld, J., Hawryluk-Gara, L.A., Pante, N., Mall, M., Galy, V., Haselmann, U., Mühlhäusser, P., Wozniak, R.W., Mattaj, I.W., Kutay, U., Antonin, W.
The conserved transmembrane nucleoporin NDC1 is required for nuclear pore complex assembly in vertebrate cells.
Mol. Cell, 22: 93-103. (2006)

3. Kutay, U. and Güttinger, S.
Leucine-rich nuclear-export signals: born to be weak.
Trends Cell Biol., 15: 121-124. Review. (**2005**)
4. Lund, E., Güttinger, S., Calado, A., Dahlberg, J.E. and Kutay, U.
Nuclear export of microRNA precursors.
Science, 303: 95-98. (**2004**)
5. Güttinger, S., Mühlhäusser, P., Koller-Eichhorn, R., Brennecke, J. and Kutay, U.
Transportin2 functions as importin and mediates nuclear import of HuR.
Proc. Natl. Acad. Sci. USA, 101: 2918-2923. (**2004**)

Invited talks

1. “Understanding the nature of molecules: process ontology and scientific practice”
Bridging the Philosophies of Biology and Chemistry (keynote). June 25-27, **2019**.
University of Paris Diderot, Paris, FR.
2. “Biology and the internet: open science and the case of vaccination”
Internet and Science: An Analysis from the Structural and Dynamic Complexity. March
14-15, **2019**. University of Å Coruna, ES.
3. “ENCODE and the nature of functional genomics”
Perspectives on the Human Genome Project and Genomics, November 14-16, **2018**.
NIH, Bethesda, MD, USA.
4. “‘Merely descriptive’: On the value of ENCODE and Big Science”
History of functional genomics programs, August 16-17, **2018**. NIH, Bethesda, MD,
USA.
5. “A new account of replication in the experimental life sciences”
Workshop: Scientific method – testing, experimenting, controlling results, June 29,
2018. University Bielefeld, DE.
6. “Proteins, processes, and nature’s joints”
Philosophy and Biology Workshop “From Thing to Being”, September 28-29, **2017**,
University of Dundee, UK.

Selected presentations

1. “Scientific metaphysics and the theory/practice dichotomy”
Biennial conference of the European Philosophy of Science Association, September 6-
9, **2017**, University of Exeter, UK.
2. “The boundaries of boundaries. Biological membranes and scientific metaphysics”
Biennial Meeting of the International Society for the History, Philosophy and Social
Sciences of Biology (ISHPSSB), July 16-21, **2017**, Sao Paulo, BR.
3. “Far Western blot: a step too far?”
Sixth International Conference on Integrated History and Philosophy of Science, July 3-

- 5, **2016**, University of Edinburgh, UK.
4. "If you go too Far Western you can't trust your data anymore"
Biennial conference of the Society for the Philosophy of Science in Practice, June 17-19, **2016**, Rowan University, Glassboro, NJ, USA.
 5. "Towards a process ontology for biochemistry"
Biennial conference of the European Philosophy of Science Association, September 23-16, **2015**, Dusseldorf, DE.
 6. "The production of change in biological systems"
Biennial Meeting of the International Society for the History, Philosophy and Social Sciences of Biology (ISHPSSB), July 6-10, **2015**, Montreal, CA.
 7. "Extending the experimental realm: descriptive and functional experimentation"
Biennial conference of the Society for the Philosophy of Science in Practice, June 24-26, **2015**, Aarhus University, DK.
 8. "The nature of exploratory experimentation and its relation to theory in the life sciences"
PSA Biennial Meeting, November 15-17, **2012**, San Diego, CA, USA.