

# SOCM016

Cultures of the Life Sciences

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1

Sociology - LibGuides at University of Exeter.  
<http://libguides.exeter.ac.uk/SociologyHomePage>

2

Gibbon S, Prainsack B, Hilgartner S, et al. Routledge Handbook of Genomics, Health and Society. London: : Routledge 2018.  
[https://exeter.primo.exlibrisgroup.com/discovery/fulldisplay?docid=alma991006732859707446&context=L&vid=44UOEX\\_INST:default](https://exeter.primo.exlibrisgroup.com/discovery/fulldisplay?docid=alma991006732859707446&context=L&vid=44UOEX_INST:default)

3

Atkinson P, Glasner P, Lock M. Handbook of Genetics and Society: Mapping the New Genomic Era. London: : Routledge 2009.  
[https://exeter.primo.exlibrisgroup.com/discovery/fulldisplay?docid=alma991006732889707446&context=L&vid=44UOEX\\_INST:default](https://exeter.primo.exlibrisgroup.com/discovery/fulldisplay?docid=alma991006732889707446&context=L&vid=44UOEX_INST:default)

4

Barnes B,  
Dupre

J. Genomes and What to Make of Them. Chicago: : University of Chicago Press 2008.  
[https://exeter.primo.exlibrisgroup.com/discovery/fulldisplay?docid=alma991006732929707446&context=L&vid=44UOEX\\_INST:default](https://exeter.primo.exlibrisgroup.com/discovery/fulldisplay?docid=alma991006732929707446&context=L&vid=44UOEX_INST:default)

5

Franklin S. Dolly Mixtures: The Remaking of Genealogy. Durham: : Duke University Press

2007.

<http://lib.myilibrary.com/browse/open.asp?id=302312&entityid=https://elibrary.exeter.ac.uk/idp/shibboleth>

6

Haraway D. *Modest\_Witness@Second\_Millennium.FemaleMan\_Meets\_OncoMouse: Feminism and Technoscience*. London: : Routledge 1997.

[https://exeter.primo.exlibrisgroup.com/discovery/fulldisplay?docid=alma991006774389707446&context=L&vid=44UOEX\\_INST:default](https://exeter.primo.exlibrisgroup.com/discovery/fulldisplay?docid=alma991006774389707446&context=L&vid=44UOEX_INST:default)

7

Hinchliffe S, Woodward K. *The Natural and the Social: Uncertainty, Risk, and Change*. Second edition. London: : Routledge 2015.

<http://www.vlebooks.com/vleweb/product/openreader?id=Exeter&isbn=9781136891526>

8

Latour B. *The Pasteurization of France*. Cambridge, Mass: : Harvard University Press 1988.

9

Meloni M, Cromby J, Fitzgerald D, et al. *The Palgrave Handbook of Biology and Society*. London: : Palgrave Macmillan 2018.

<http://www.vlebooks.com/vleweb/product/openreader?id=Exeter&isbn=9781137528797>

10

Parry S, Dupre J, editors. *Nature After the Genome*. Malden, MA: : Wiley-Blackwell/The Sociological Review 2010.

11

Rabinow P. *French DNA: Trouble in Purgatory*. Chicago: : University of Chicago Press 2017.

[https://exeter.primo.exlibrisgroup.com/discovery/fulldisplay?docid=alma991006733039707446&context=L&vid=44UOEX\\_INST:default](https://exeter.primo.exlibrisgroup.com/discovery/fulldisplay?docid=alma991006733039707446&context=L&vid=44UOEX_INST:default)

12

Sunder Rajan K. *Biocapital: The Constitution of Postgenomic Life*. Durham, NC: : Duke University Press 2006.

<http://www.vlebooks.com/vleweb/product/openreader?id=Exeter&isbn=9780822388005>

13

Sunder Rajan K. *Pharmocracy: Value, Politics, and Knowledge in Global Biomedicine*. Durham, NC: : Duke University Press 2017.

[https://exeter.primo.exlibrisgroup.com/discovery/fulldisplay?docid=alma991004748079707446&context=L&vid=44UOEX\\_INST:default](https://exeter.primo.exlibrisgroup.com/discovery/fulldisplay?docid=alma991004748079707446&context=L&vid=44UOEX_INST:default)

14

Rose N. *The Politics of Life Itself: Biomedicine, Power, and Subjectivity in the Twenty-First Century*. Princeton: : Princeton University Press 2006.

[https://exeter.primo.exlibrisgroup.com/discovery/fulldisplay?docid=alma991015010859707446&context=L&vid=44UOEX\\_INST:default](https://exeter.primo.exlibrisgroup.com/discovery/fulldisplay?docid=alma991015010859707446&context=L&vid=44UOEX_INST:default)

15

Richardson SS, Stevens H. *Postgenomics: Perspectives on Biology after the Genome*. Durham, NC: : Duke University Press 2015.

[https://exeter.primo.exlibrisgroup.com/discovery/fulldisplay?docid=alma991004748129707446&context=L&vid=44UOEX\\_INST:default](https://exeter.primo.exlibrisgroup.com/discovery/fulldisplay?docid=alma991004748129707446&context=L&vid=44UOEX_INST:default)

16

Bedau M, Cleland CE. *The Nature of Life: Classical and Contemporary Perspectives from Philosophy and Science*. Cambridge University Press 2010.

[https://exeter.primo.exlibrisgroup.com/discovery/fulldisplay?docid=alma991000759149707446&context=L&vid=44UOEX\\_INST:default](https://exeter.primo.exlibrisgroup.com/discovery/fulldisplay?docid=alma991000759149707446&context=L&vid=44UOEX_INST:default)

17

Dupre

J. *Processes of Life: Essays in the Philosophy of Biology*. Oxford: : Oxford University Press

2012.

[https://exeter.primo.exlibrisgroup.com/discovery/fulldisplay?docid=alma991001532729707446&context=L&vid=44UOEX\\_INST:default](https://exeter.primo.exlibrisgroup.com/discovery/fulldisplay?docid=alma991001532729707446&context=L&vid=44UOEX_INST:default)

18

Grene M, Depew D. *The Philosophy of Biology: An Episodic History*. Cambridge: : Cambridge University Press 2004.

[https://exeter.primo.exlibrisgroup.com/discovery/fulldisplay?docid=alma991003202279707446&context=L&vid=44UOEX\\_INST:default](https://exeter.primo.exlibrisgroup.com/discovery/fulldisplay?docid=alma991003202279707446&context=L&vid=44UOEX_INST:default)

19

Hull DL. *Philosophy of Biological Science*. Englewood Cliffs: : Prentice-Hall 1974.

20

Hull DL, Ruse M. *The Cambridge Companion to the Philosophy of Biology*. Cambridge: : Cambridge University Press 2007.

[https://exeter.primo.exlibrisgroup.com/discovery/fulldisplay?docid=alma991015275109707446&context=L&vid=44UOEX\\_INST:default](https://exeter.primo.exlibrisgroup.com/discovery/fulldisplay?docid=alma991015275109707446&context=L&vid=44UOEX_INST:default)

21

Matthen M, Stephens C. *Philosophy of Biology*. Amsterdam: : Elsevier 2007.

[https://exeter.primo.exlibrisgroup.com/discovery/fulldisplay?docid=alma991006733139707446&context=L&vid=44UOEX\\_INST:default](https://exeter.primo.exlibrisgroup.com/discovery/fulldisplay?docid=alma991006733139707446&context=L&vid=44UOEX_INST:default)

22

Mayr E. *Toward a New Philosophy of Biology: Observations of an Evolutionist*. Cambridge, Mass: : Belknap Press of Harvard University Press 1988.

23

O'Malley M. *Philosophy of Microbiology*. Cambridge University Press 2014.

<https://uoelibrary.idm.oclc.org/login?url=http://www.cambridge.org/core/books/philosophy-of-microbiology/66F30F77991E16732EA7ED6E51314BBE>

24

Ruse M. The Oxford Handbook of Philosophy of Biology. Oxford: : Oxford University Press 2008.  
[https://exeter.primo.exlibrisgroup.com/discovery/fulldisplay?docid=alma991000518369707446&context=L&vid=44UOEX\\_INST:default](https://exeter.primo.exlibrisgroup.com/discovery/fulldisplay?docid=alma991000518369707446&context=L&vid=44UOEX_INST:default)

25

Sarkar S, Plutynski A. A Companion to the Philosophy of Biology. Malden, MA: : Blackwell Pub 2008.  
[https://exeter.primo.exlibrisgroup.com/discovery/fulldisplay?docid=alma991000545569707446&context=L&vid=44UOEX\\_INST:default](https://exeter.primo.exlibrisgroup.com/discovery/fulldisplay?docid=alma991000545569707446&context=L&vid=44UOEX_INST:default)

26

Sober E. Philosophy of Biology. 2nd ed. Boulder, CO: : Westview Press 2018.  
[https://exeter.primo.exlibrisgroup.com/discovery/fulldisplay?docid=alma991006733169707446&context=L&vid=44UOEX\\_INST:default](https://exeter.primo.exlibrisgroup.com/discovery/fulldisplay?docid=alma991006733169707446&context=L&vid=44UOEX_INST:default)

27

Schaffner KF. Discovery and Explanation in Biology and Medicine. Chicago: : University of Chicago Press 1993.

28

Sterelny K, Griffiths PE. Sex and Death: An Introduction to Philosophy of Biology. Chicago, Ill: : University of Chicago Press 1999.

29

Wimsatt WC. Re-Engineering Philosophy for Limited Beings. Cambridge, Mass: : Harvard University Press 2007.

30

Allen GE. Life Science in the Twentieth Century. Cambridge: : Cambridge University Press 1979.

31

Bowler PJ. *Evolution: The History of an Idea*. 3rd ed., Completely rev. and expanded. Berkeley, Calif.: : University of California Press 2003.

[https://exeter.primo.exlibrisgroup.com/discovery/fulldisplay?docid=alma991015772629707446&context=L&vid=44UOEX\\_INST:default](https://exeter.primo.exlibrisgroup.com/discovery/fulldisplay?docid=alma991015772629707446&context=L&vid=44UOEX_INST:default)

32

Coleman W. *Biology in the Nineteenth Century: Problems of Form, Function and Transformation*. Cambridge [etc.]: : Cambridge University Press 1977.

33

Dietrich M, Borrello M, Harman O. *Handbook of the Historiography of Biology*. Cham: : Springer 2019.

[https://exeter.primo.exlibrisgroup.com/discovery/fulldisplay?docid=alma991007660869707446&context=L&vid=44UOEX\\_INST:default](https://exeter.primo.exlibrisgroup.com/discovery/fulldisplay?docid=alma991007660869707446&context=L&vid=44UOEX_INST:default)

34

Fleck L, Trenn TJ, Merton RK. *Genesis and Development of a Scientific Fact*. Chicago: : University of Chicago Press 1981.

35

Judson HF. *The Eighth Day of Creation: Makers of the Revolution in Biology*. Expanded ed. Plainview, N.Y.: : CSHL Press 1996.

36

Laubichler MD, Maienschein J. *From Embryology to Evo-Devo: A History of Developmental Evolution*. Cambridge, Mass: : MIT Press 2007.

[https://exeter.primo.exlibrisgroup.com/discovery/fulldisplay?docid=alma991000543609707446&context=L&vid=44UOEX\\_INST:default](https://exeter.primo.exlibrisgroup.com/discovery/fulldisplay?docid=alma991000543609707446&context=L&vid=44UOEX_INST:default)

37

Mu

Iler-Wille S, Rheinberger H-J. A Cultural History of Heredity. Chicago, Il: : University of Chicago Press 2012.

[https://exeter.primo.exlibrisgroup.com/discovery/fulldisplay?docid=alma991001382559707446&context=L&vid=44UOEX\\_INST:default](https://exeter.primo.exlibrisgroup.com/discovery/fulldisplay?docid=alma991001382559707446&context=L&vid=44UOEX_INST:default)

38

Morange M. A History of Molecular Biology. Cambridge, Mass: : Harvard University Press 1998.

39

Mayr E. The Growth of Biological Thought: Diversity, Evolution and Inheritance. Cambridge, Mass: : Belknap Press of Harvard University Press 1982.

40

Rheinberger H-J. An Epistemology of the Concrete: Twentieth-Century Histories of Life. Durham, NC: : Duke University Press 2010.

<http://www.vlebooks.com/vleweb/product/openreader?id=Exeter&isbn=9780822391333>

41

Sapp J. Genesis: The Evolution of Biology. Oxford: : Oxford University Press 2003.

<https://uoelibrary.idm.oclc.org/login?url=http://www.oxfordscholarship.com/view/10.1093/acprof:oso/9780195156195.001.0001/acprof-9780195156195>

42

Biological Theory.

[https://exeter.primo.exlibrisgroup.com/discovery/fulldisplay?docid=alma991015573219707446&context=L&vid=44UOEX\\_INST:default](https://exeter.primo.exlibrisgroup.com/discovery/fulldisplay?docid=alma991015573219707446&context=L&vid=44UOEX_INST:default)

43

Biology and Philosophy.

<https://exeter.primo.exlibrisgroup.com/discovery/fulldisplay?docid=alma99101324151970>

7446&context=L&vid=44UOEX\_INST:default

44

BioSocieties.

[https://exeter.primo.exlibrisgroup.com/discovery/fulldisplay?docid=alma991002493739707446&context=L&vid=44UOEX\\_INST:default](https://exeter.primo.exlibrisgroup.com/discovery/fulldisplay?docid=alma991002493739707446&context=L&vid=44UOEX_INST:default)

45

History and Philosophy of the Life Sciences.

[https://exeter.primo.exlibrisgroup.com/discovery/fulldisplay?docid=alma991002916619707446&context=L&vid=44UOEX\\_INST:default](https://exeter.primo.exlibrisgroup.com/discovery/fulldisplay?docid=alma991002916619707446&context=L&vid=44UOEX_INST:default)

46

New Genetics and Society.

<https://uoelibrary.idm.oclc.org/login?url=http://www.tandfonline.com/openurl?genre=journal&stitle=cngs20>

47

Journal of the History of Biology.

[https://exeter.primo.exlibrisgroup.com/discovery/fulldisplay?docid=alma991015050169707446&context=L&vid=44UOEX\\_INST:default](https://exeter.primo.exlibrisgroup.com/discovery/fulldisplay?docid=alma991015050169707446&context=L&vid=44UOEX_INST:default)

48

Studies in History and Philosophy of Sciences Part C.

[https://exeter.primo.exlibrisgroup.com/discovery/fulldisplay?docid=alma991015612629707446&context=L&vid=44UOEX\\_INST:default](https://exeter.primo.exlibrisgroup.com/discovery/fulldisplay?docid=alma991015612629707446&context=L&vid=44UOEX_INST:default)

49

Theoretical Medicine and Bioethics.

[https://exeter.primo.exlibrisgroup.com/discovery/fulldisplay?docid=alma991015632229707446&context=L&vid=44UOEX\\_INST:default](https://exeter.primo.exlibrisgroup.com/discovery/fulldisplay?docid=alma991015632229707446&context=L&vid=44UOEX_INST:default)



50

Haldane JBS. Daedalus: Or Science and the Future (A paper read to the Heretics, Cambridge, on February 4th, 1923). 6th impression. London: : Kegan Paul, Trench, Trubner & co, ltd 1925. <https://www.marxists.org/archive/haldane/works/1920s/daedalus.htm>

51

Polanyi M. 'Life's Irreducible Structure'. Science 1968;**160**:1308-12.<https://uoelibrary.idm.oclc.org/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=edsjsr&AN=edsjsr.1724152&site=eds-live&scope=site>

52

Jacob F. Evolution and tinkering. Science 1977;**196**:1161-6.<https://uoelibrary.idm.oclc.org/login?url=http://www.jstor.org/stable/1744610>

53

Beatty J. Why do Biologists Argue Like They do? Philosophy of Science 1997;**64**:S432-43.<https://uoelibrary.idm.oclc.org/login?url=http://www.jstor.org/stable/188423>

54

Brandon RN. 'Does Biology Have Laws? The Experimental Evidence'. Philosophy of Science 1997;**64**:S444-57.<https://uoelibrary.idm.oclc.org/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=edsjsr&AN=edsjsr.188424&site=eds-live&scope=site>

55

Sober E. 'Two Outbreaks of Lawlessness in Recent Philosophy of Biology'. Philosophy of Science 1997;**64**:S458-67.<https://uoelibrary.idm.oclc.org/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=edsjsr&AN=edsjsr.188425&site=eds-live&scope=site>

56

Mitchell SD. 'Pragmatic Laws'. *Philosophy of Science* 1997;**64**:S468–79.<https://uoelibrary.idm.oclc.org/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=edsjsr&AN=edsjsr.188426&site=eds-live&scope=sit>e

57

Garson J. Chapter 28 - 'Function and Teleology'. In: *A Companion to the Philosophy of Biology*. Malden, MA: : Blackwell Pub 2008. 525–49.[https://exeter.primo.exlibrisgroup.com/discovery/fulldisplay?docid=alma991000545569707446&context=L&vid=44UOEX\\_INST:default](https://exeter.primo.exlibrisgroup.com/discovery/fulldisplay?docid=alma991000545569707446&context=L&vid=44UOEX_INST:default)

58

Rosenberg A. Chapter 7 - 'Reductionism (and Antireductionism) in Biology'. In: *The Cambridge Companion to the Philosophy of Biology*. 2007. 120–38.[https://exeter.primo.exlibrisgroup.com/discovery/fulldisplay?docid=alma991015275109707446&context=L&vid=44UOEX\\_INST:default](https://exeter.primo.exlibrisgroup.com/discovery/fulldisplay?docid=alma991015275109707446&context=L&vid=44UOEX_INST:default)

59

Beatty J. 'What's Wrong with the Received View of Evolutionary Theory?' *PSA: Proceedings of the Biennial Meeting of the Philosophy of Science Association* 1980;**1980**:397–426.<https://uoelibrary.idm.oclc.org/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=edsjsr&AN=edsjsr.192601&site=eds-live&scope=sit>e

60

Beatty J. 'Why do Biologists Argue Like They do?' *Philosophy of Science* 1997;**64**:S432–43.<https://uoelibrary.idm.oclc.org/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=edsjsr&AN=edsjsr.188423&site=eds-live&scope=sit>e

61

Brigandt I, Love A. 'Reductionism in Biology'. *The Stanford Encyclopedia of Philosophy* Published Online First: 2017.<https://plato.stanford.edu/entries/reduction-biology/>

62

Cassirer E. *The Problem of Knowledge: Philosophy, Science and History Since Hegel*. New Haven: : Yale University Press 1950.

63

Craver CF. 'Beyond Reduction: Mechanisms, Multi-Field Integration and the Unity of Neuroscience'. *Studies in History and Philosophy of Science Part C* 2005;**36**:373–95.<https://uoelibrary.idm.oclc.org/login?url=http://www.sciencedirect.com/science/article/pii/S1369848605000245>

64

Ghiselin MT. 'Individuality, History and Laws of Nature in Biology'. In: *What the Philosophy of Biology Is: Essays Dedicated to David Hull*. Springer Netherlands 1989. 53–66.[https://exeter.primo.exlibrisgroup.com/discovery/fulldisplay?docid=alma991006733279707446&context=L&vid=44UOEX\\_INST:default](https://exeter.primo.exlibrisgroup.com/discovery/fulldisplay?docid=alma991006733279707446&context=L&vid=44UOEX_INST:default)

65

Gotthelf A, Lennox JG. *Philosophical Issues in Aristotle's Biology*. Cambridge University Press 1987.  
[https://exeter.primo.exlibrisgroup.com/discovery/fulldisplay?docid=alma991003680109707446&context=L&vid=44UOEX\\_INST:default](https://exeter.primo.exlibrisgroup.com/discovery/fulldisplay?docid=alma991003680109707446&context=L&vid=44UOEX_INST:default)

66

Helmreich S. 'What was Life? Answers from Three Limit Biologies'. *Critical Inquiry* 2011;**37**:671–96.<https://uoelibrary.idm.oclc.org/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=edsjsr&AN=edsjsr.10.1086.660987&site=eds-live&scope=site>

67

Kant I. Part 2 - 'Critique of the Teleological Judgement'. In: Bernard JH, ed. *Critique of Judgement*. Mineola, NY: : Dover Publications 2005.  
[https://exeter.primo.exlibrisgroup.com/discovery/fulldisplay?docid=alma991000853589707446&context=L&vid=44UOEX\\_INST:default](https://exeter.primo.exlibrisgroup.com/discovery/fulldisplay?docid=alma991000853589707446&context=L&vid=44UOEX_INST:default)

68

Machamer P, Darden L, Craver CF. 'Thinking About Mechanisms'. *Philosophy of Science* 2000;**67**:1-25.<https://uoelibrary.idm.oclc.org/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=edsjsr&AN=edsjsr.188611&site=eds-live&scope=site>

69

Mayr E. *This is Biology: The Science of the Living World*. Cambridge, Mass: : Belknap Press of Harvard University Press 1997.

70

McLaughlin P. *What Functions Explain: Functional Explanation and Self-Reproducing Systems*. Cambridge: : Cambridge University Press 2001.  
[https://exeter.primo.exlibrisgroup.com/discovery/fulldisplay?docid=alma991003402069707446&context=L&vid=44UOEX\\_INST:default](https://exeter.primo.exlibrisgroup.com/discovery/fulldisplay?docid=alma991003402069707446&context=L&vid=44UOEX_INST:default)

71

Nicholson DJ. The Concept of Mechanism in Biology. *Studies in History and Philosophy of Biological and Biomedical Sciences* 2012;**43**:152-63.<https://uoelibrary.idm.oclc.org/login?url=http://www.sciencedirect.com/science/article/pii/S1369848611000501>

72

Nicholson DJ, Gawne R. 'Rethinking Woodger's Legacy in the Philosophy of Biology'. *Journal of the History of Biology* 2014;**47**:243-92.<https://uoelibrary.idm.oclc.org/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=edsjsr&AN=edsjsr.43863377&site=eds-live&scope=site>

73

Normandin S, Wolfe CT. *Vitalism and the Scientific Image in Post-Enlightenment Life Science, 1800-2010*. Dordrecht: : Springer 2013.  
[https://exeter.primo.exlibrisgroup.com/discovery/fulldisplay?docid=alma991003823049707446&context=L&vid=44UOEX\\_INST:default](https://exeter.primo.exlibrisgroup.com/discovery/fulldisplay?docid=alma991003823049707446&context=L&vid=44UOEX_INST:default)

74

Rosenberg A. *The Structure of Biological Science*. Cambridge: : Cambridge University Press 1985.

[https://exeter.primo.exlibrisgroup.com/discovery/fulldisplay?docid=alma991003523509707446&context=L&vid=44UOEX\\_INST:default](https://exeter.primo.exlibrisgroup.com/discovery/fulldisplay?docid=alma991003523509707446&context=L&vid=44UOEX_INST:default)

75

Schaffner KF. 'Reduction: The Cheshire Cat Problem and a Return to Roots'. *Synthese* 2006;**151**

:377–402. <https://uoelibrary.idm.oclc.org/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=edsjsr&AN=edsjsr.20118816&site=eds-live&scope=site>

76

Skipper RA, Millstein RL. *Thinking About Evolutionary Mechanisms: Natural Selection*. *Studies in History and Philosophy of Biological and Biomedical Sciences* 2005;**36**

:327–47. <https://uoelibrary.idm.oclc.org/login?url=http://www.sciencedirect.com/science/article/pii/S1369848605000221>

77

Stotz K. *Biohumanities: Rethinking the Relationship Between Biosciences, Philosophy and History of Science and Society*. *The Quarterly Review of Biology* 2008;**83**

:37–45. <https://uoelibrary.idm.oclc.org/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=edsjsr&AN=edsjsr.10.1086.529561&site=eds-live&scope=site>

78

Wilson EO. *Consilience: The Unity of Knowledge*. London: : Abacus 1999.

79

Woese CR. 'A New Biology for a New Century'. *Microbiology and Molecular Biology Reviews* 2004;**68**

:173–86. <https://uoelibrary.idm.oclc.org/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=edsbl&AN=RN151397139&site=eds-live&scope=site>

80

Richards RA. Chapter 7: Species and taxonomy. In: The Oxford Handbook of Philosophy of Biology. New York: : Oxford University Press 2008. 161-88.<https://uoelibrary.idm.oclc.org/login?url=http://www.oxfordhandbooks.com/view/10.1093/oxfordhb/9780195182057.001.0001/oxfordhb-9780195182057-e-008>

81

Mayr E. 'The Ontological Status of Species: Scientific Progress and Philosophical Terminology'. *Biology and Philosophy* 1987;**2**:145-66.<https://uoelibrary.idm.oclc.org/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=phl&AN=PHL1149260&site=eds-live&scope=site>

82

Dupré J. 'In Defence of Classification'. *Studies in History and Philosophy of Biological and Biomedical Sciences* 2001;**32**:203-19.[https://encore.exeter.ac.uk/iii/encore/record/C\\_\\_Rx1029723](https://encore.exeter.ac.uk/iii/encore/record/C__Rx1029723)

83

Ereshefsky M. Chapter 6 - 'Systematics and Taxonomy'. In: *A Companion to the Philosophy of Biology*. Malden, MA: : Blackwell Pub 2008. 99-118.[https://exeter.primo.exlibrisgroup.com/discovery/fulldisplay?docid=alma991000545569707446&context=L&vid=44UOEX\\_INST:default](https://exeter.primo.exlibrisgroup.com/discovery/fulldisplay?docid=alma991000545569707446&context=L&vid=44UOEX_INST:default)

84

Sloan PR. 'Buffon, German Biology and the Historical Interpretation of Biological Species'. *The British Journal for the History of Science* 1979;**12**:109-53.<https://uoelibrary.idm.oclc.org/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=edsjsr&AN=edsjsr.4025750&site=eds-live&scope=site>

85

de Queiroz K. 'Species Concepts and Species Delimitation'. *Systematic Biology* 2007;**56**:879-86.<https://uoelibrary.idm.oclc.org/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=edsjsr&AN=edsjsr.20143099&site=eds-live&scope=s>

ite

86

Richards RA. *The Species Problem: A Philosophical Analysis*. Cambridge: : Cambridge University Press 2010.

[https://exeter.primo.exlibrisgroup.com/discovery/fulldisplay?docid=alma991003375489707446&context=L&vid=44UOEX\\_INST:default](https://exeter.primo.exlibrisgroup.com/discovery/fulldisplay?docid=alma991003375489707446&context=L&vid=44UOEX_INST:default)

87

Berlin B. *Ethnobiological Classification: Principles of Categorization of Plants and Animals in Traditional Societies*. Princeton University Press 1992.

[https://exeter.primo.exlibrisgroup.com/discovery/fulldisplay?docid=alma991006191509707446&context=L&vid=44UOEX\\_INST:default](https://exeter.primo.exlibrisgroup.com/discovery/fulldisplay?docid=alma991006191509707446&context=L&vid=44UOEX_INST:default)

88

Cartwright N. Introduction. In: *The Dappled World: A Study of the Boundaries of Science*. Cambridge: : Cambridge University Press 1999.

1-20. [https://exeter.primo.exlibrisgroup.com/discovery/fulldisplay?docid=alma991003554729707446&context=L&vid=44UOEX\\_INST:default](https://exeter.primo.exlibrisgroup.com/discovery/fulldisplay?docid=alma991003554729707446&context=L&vid=44UOEX_INST:default)

89

Cotton CM. *Ethnobotany: Principles and Applications*. Chichester: : Wiley 1996.

90

Douglas M, Hull DL. *How Classification Works: Nelson Goodman Among the Social Sciences*. Edinburgh: : Edinburgh U.P. 1992.

91

Dupre

J. *The Disorder of Things: Metaphysical Foundations of the Disunity of Science*. Cambridge, Mass: : Harvard University Press 1993.

92

Dupre

J. Humans and Other Animals. Oxford: : Clarendon 2002.

93

Durkheim É, Mauss M. Primitive Classification. London: : Routledge 2010.

<https://uoelibrary.idm.oclc.org/login?url=http://www.taylorfrancis.com/books/9780203092828>

94

Ghiselin MT. 'Species Concepts, Individuality and Objectivity'. *Biology and Philosophy* 1987;**2**

:127–43.<https://uoelibrary.idm.oclc.org/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=phl&AN=PHL1149259&site=eds-live&scope=site>

95

Hull DL. *Science as a Process: An Evolutionary Account of the Social and Conceptual Development of Science*. Chicago: : University of Chicago Press 1988.

[https://exeter.primo.exlibrisgroup.com/discovery/fulldisplay?docid=alma991006733439707446&context=L&vid=44UOEX\\_INST:default](https://exeter.primo.exlibrisgroup.com/discovery/fulldisplay?docid=alma991006733439707446&context=L&vid=44UOEX_INST:default)

96

Kellert SH, Longino HE, Waters KC. *Scientific Pluralism*. Minneapolis, MN: : University of Minnesota Press 2006.

[https://exeter.primo.exlibrisgroup.com/discovery/fulldisplay?docid=alma991005786569707446&context=L&vid=44UOEX\\_INST:default](https://exeter.primo.exlibrisgroup.com/discovery/fulldisplay?docid=alma991005786569707446&context=L&vid=44UOEX_INST:default)

97

Leonelli S. 'Classificatory Theory in Biology'. *Biological Theory* 2013;**7**

:338–45.<https://uoelibrary.idm.oclc.org/login?url=http://link.springer.com/article/10.1007/s13752-012-0049-z>

98



Longino HE. Chapter 12 - 'Towards an Epistemology for Biological Pluralism'. In: *Biology and Epistemology*. Cambridge: : Cambridge University Press 2000. 261-86.<https://contentstore.cla.co.uk/secure/link?id=1e1eca7d-9796-e611-80c7-005056af4099>

99

Mallet J. 'Mayr's View of Darwin: Was Darwin Wrong About Speciation?' *Biological Journal of the Linnean Society* 2008;**95**:3-16.<https://uoelibrary.idm.oclc.org/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=edsbl&AN=RN237497168&site=eds-live&scope=site>

100

Mayr E. Chapter 5 - 'The Systematic Categories and the New Species Concept'. In: *Systematics and the Origin of Species: From the Viewpoint of a Zoologist*. New York: : Columbia University Press 1942. 102-22.<https://archive.org/details/in.ernet.dli.2015.20284>

101

Mayr E. Chapter 33 - 'Species Concepts and Definitions'. In: *Evolution and the Diversity of Life: Selected Essays*. Cambridge, Mass: : Belknap Press of Harvard University Press 1976. 493-508.<https://contentstore.cla.co.uk/secure/link?id=bd202085-0496-e611-80c7-005056af4099>

102

Mcouat G. 'Cataloguing Power: Delineating "Competent Naturalists" and the Meaning of Species in the British Museum'. *The British Journal for the History of Science* 2001;**34**:1-28.<https://uoelibrary.idm.oclc.org/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=edsjsr&AN=edsjsr.4028036&site=eds-live&scope=site>

103

O'Malley MA, Martin W, Dupré J. 'The Tree of Life: Introduction to an Evolutionary Debate'. *Biology & Philosophy* 2010;**25**:441-53.<https://uoelibrary.idm.oclc.org/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=phl&AN=PHL2194082&site=eds-live&scope=site>

104

Panchen AL. Classification, Evolution and the Nature of Biology. Cambridge University Press 1992.

[https://exeter.primo.exlibrisgroup.com/discovery/fulldisplay?docid=alma991003719369707446&context=L&vid=44UOEX\\_INST:default](https://exeter.primo.exlibrisgroup.com/discovery/fulldisplay?docid=alma991003719369707446&context=L&vid=44UOEX_INST:default)

105

Plutynski A. Chapter 10 - 'Specification and Macroevolution'. In: A Companion to the Philosophy of Biology. Malden, MA: : Blackwell Pub 2008.

169–85.[https://exeter.primo.exlibrisgroup.com/discovery/fulldisplay?docid=alma991000545569707446&context=L&vid=44UOEX\\_INST:default](https://exeter.primo.exlibrisgroup.com/discovery/fulldisplay?docid=alma991000545569707446&context=L&vid=44UOEX_INST:default)

106

Rieppel O. 'New Essentialism in Biology'. Philosophy of Science 2010;**77**

:662–73.<https://uoelibrary.idm.oclc.org/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=edsjsr&AN=edsjsr.10.1086.656539&site=eds-live&scope=site>

107

Sloan PR. 'John Locke, John Ray and the Problem of the Natural System'. Journal of the History of Biology 1972;**5**

:1–53.<https://uoelibrary.idm.oclc.org/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=edsjsr&AN=edsjsr.4330568&site=eds-live&scope=site>

108

Ogilvie BW. 'The Many Books of Nature: Renaissance Naturalists and Information Overload'. Journal of the History of Ideas 2003;**64**

:29–40.<https://uoelibrary.idm.oclc.org/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=edsjsr&AN=edsjsr.10.2307.3654294&site=eds-live&scope=site>

109

Müller-Wille S, Charmantier I. 'Natural History and Information Overload: The Case of

Linnaeus'. *Studies in History and Philosophy of Biological and Biomedical Sciences* 2012;**43**:4–15.<https://uoelibrary.idm.oclc.org/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=edselp&AN=S1369848611001130&site=eds-live&scope=site>

110

McOuat GR. Species, rules and meaning: The politics of language and the ends of definitions in 19th century natural history. *Studies in History and Philosophy of Science Part A* 1996;**27**:473–519.<https://uoelibrary.idm.oclc.org/login?url=http://www.sciencedirect.com/science/article/pii/0039368195000607>

111

Farber PL. *Finding Order in Nature: The Naturalist Tradition from Linnaeus to E. O. Wilson*. Baltimore, Md: : Johns Hopkins University Press 2000.  
[https://exeter.primo.exlibrisgroup.com/discovery/fulldisplay?docid=alma991006733469707446&context=L&vid=44UOEX\\_INST:default](https://exeter.primo.exlibrisgroup.com/discovery/fulldisplay?docid=alma991006733469707446&context=L&vid=44UOEX_INST:default)

112

Mayr E. *The Growth of Biological Thought: Diversity, Evolution and Inheritance*. Cambridge, Mass: : Belknap Press of Harvard University Press 1982.

113

Snyder LJ. William Whewell. *The Stanford Encyclopedia of Philosophy* Published Online First: 2017.<https://plato.stanford.edu/entries/whewell/>

114

Bowker GC, Star SL. *Sorting Things Out: Classification and Its Consequences*. Cambridge, Mass: : MIT Press 2000.  
[https://exeter.primo.exlibrisgroup.com/discovery/fulldisplay?docid=alma991003893979707446&context=L&vid=44UOEX\\_INST:default](https://exeter.primo.exlibrisgroup.com/discovery/fulldisplay?docid=alma991003893979707446&context=L&vid=44UOEX_INST:default)

115

Atran S. *Cognitive Foundations of Natural History: Towards an Anthropology of Science*.

Cambridge: : Cambridge University Press 1999.

116

Bacon F, Urbach P, Gibson J. *Novum Organum: With Other Parts of the Great Instauration*. Chicago, Ill: : Open Court 1994.

117

Barrera-Osorio A. *Experiencing Nature: The Spanish American Empire and the Early Scientific Revolution*. University of Texas Press: 2006.

118

Cook HJ. *Matters of Exchange: Commerce, Medicine, and Science in the Dutch Golden Age*. New Haven, Conn: : Yale University Press 2007.  
[https://exeter.primo.exlibrisgroup.com/discovery/fulldisplay?docid=alma991003205809707446&context=L&vid=44UOEX\\_INST:default](https://exeter.primo.exlibrisgroup.com/discovery/fulldisplay?docid=alma991003205809707446&context=L&vid=44UOEX_INST:default)

119

Daston L. 'Type Specimens and Scientific Memory'. *Critical Inquiry* 2004;**31**:153-82.  
<https://uoelibrary.idm.oclc.org/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=edsjsr&AN=edsjsr.10.1086.427306&site=eds-live&scope=site>

120

te Heesen A. 'Boxes in Nature'. *Studies in History and Philosophy of Science Part A* 2000;**31**:381-403.  
<https://uoelibrary.idm.oclc.org/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=edsbl&AN=RN083776481&site=eds-live&scope=site>

121

Endersby J. *Imperial Nature: Joseph Hooker and the Practices of Victorian Science*. Chicago, Ill: : University of Chicago Press 2008.

122

Jardine N. *Cultures of Natural History*. Cambridge: : Cambridge University Press 1996.

123

Law J, Lynch M. 'Lists, Field Guides and the Descriptive Organization of Seeing: Birdwatching as an Exemplary Observational Activity'. *Human Studies* 1988;**11**:271-303.<https://uoelibrary.idm.oclc.org/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=edsjsr&AN=edsjsr.20009028&site=eds-live&scope=site>

124

Müller-Wille S. 'Collection and Collation: Theory and Practice of Linnaean Botany'. *Studies in History and Philosophy of Biological and Biomedical Sciences* 2007;**38**:541-62.<https://uoelibrary.idm.oclc.org/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=edselp&AN=S1369848607000428&site=eds-live&scope=site>

125

Ogilvie BW. *The Science of Describing: Natural History in Renaissance Europe*. Nachdr. Chicago, IL: : University of Chicago Press 2006.  
[https://exeter.primo.exlibrisgroup.com/discovery/fulldisplay?docid=alma991006733499707446&context=L&vid=44UOEX\\_INST:default](https://exeter.primo.exlibrisgroup.com/discovery/fulldisplay?docid=alma991006733499707446&context=L&vid=44UOEX_INST:default)

126

Pickstone JV. *Ways of Knowing: A New History of Science, Technology and Medicine*. Manchester: : Manchester University Press 2000.

127

Rieppel O. 'The Series, the Network and the Tree: Changing Metaphors of Order in Nature'. *Biology & Philosophy* 2010;**25**:475-96.<https://uoelibrary.idm.oclc.org/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=edsbl&AN=RN276953629&site=eds-live&scope=site>

128

Scharf ST. 'Identification Keys, the "Natural Method" and the Development of Plant Identification Manuals'. *Journal of the History of Biology* 2009;**42**:73-117.<https://uoelibrary.idm.oclc.org/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=edsjsr&AN=edsjsr.40271533&site=eds-live&scope=site>

129

Strasser BJ. *Collecting and Experimenting: The Moral Economies of Biological Research, 1960s-1980s. History and Epistemology of Molecular Biology and Beyond: Problems and Perspectives: Workshop.* 2006;**310**:105-23.[http://biologie.unige.ch/assets/brunostrasser//Strasser\\_MPI\\_2006.pdf](http://biologie.unige.ch/assets/brunostrasser//Strasser_MPI_2006.pdf)

130

Whewell W. *The Philosophy of the Inductive Sciences.* London: : Parker 1840.

131

Leonelli S. Introduction. In: *Data-Centric Biology: A Philosophical Study.* Chicago: : The University of Chicago Press 2016. 1-9.<http://www.vlebooks.com/vleweb/product/openreader?id=Exeter&isbn=9780226416502>

132

Leonelli S. Chapter 3: What Counts as Data? In: *Data-Centric Biology: A Philosophical Study* . Chicago: : The University of Chicago Press 2016. 69-92.<http://www.vlebooks.com/vleweb/product/openreader?id=Exeter&isbn=9780226416502>

133

Kell DB, Oliver SG. Here is the Evidence, Now What is the Hypothesis? The Complementary Roles of Inductive and Hypothesis-Driven Science in the Post-Genomic Era. *BioEssays* 2004;**26**:99-105.<https://uoelibrary.idm.oclc.org/login?url=http://onlinelibrary.wiley.com/doi/full/10.1002/bies.10385>

134

Waters CK. The Nature and Context of Exploratory Experimentation: An Introduction to Three Case Studies of Exploratory Research. *History and Philosophy of the Life Sciences* 2007;**29**:275–84. <https://uoelibrary.idm.oclc.org/login?url=http://www.jstor.org/stable/23334262>

135

Hey AJG, Tansley S, Tolle K. *The Fourth Paradigm: Data-Intensive Scientific Discovery*. Microsoft Research 2009. <https://www.microsoft.com/en-us/research/publication/fourth-paradigm-data-intensive-scientific-discovery>

136

Leonelli S. What Difference Does Quantity Make? On the Epistemology of Big Data in Biology. *Big Data & Society* 2014;**1**:1–11. <https://uoelibrary.idm.oclc.org/login?url=http://journals.sagepub.com/doi/full/10.1177/2053951714534395>

137

Strasser BJ. *Collecting Nature: Practices, Styles and Narratives*. *Osiris* 2012;**27**:303–40. <https://uoelibrary.idm.oclc.org/login?url=http://www.jstor.org/stable/10.1086/667832>

138

Allen JF. *Bioinformatics and Discovery: Induction Beckons Again*. *BioEssays* 2000;**23**:104–7. <https://uoelibrary.idm.oclc.org/login?url=http://onlinelibrary.wiley.com/doi/full/10.1002/1521-1878%28200101%2923%3A1%3C104%3A%3AAID-BIES1013%3E3.0.CO%3B2-2>

139

Botstein D, Cherry JM, Ashburner M, et al. *Gene Ontology: Tool for the Unification of Biology*. *Nature Genetics* 2000;**25**:25–9. [https://uoelibrary.idm.oclc.org/login?url=http://www.nature.com/ng/journal/v25/n1/full/ng0500\\_25.html](https://uoelibrary.idm.oclc.org/login?url=http://www.nature.com/ng/journal/v25/n1/full/ng0500_25.html)

140

Bell G, Hey T, Szalay A. Beyond the Data Deluge. *Science* 2009;**323**:1297–8.<https://uoelibrary.idm.oclc.org/login?url=http://www.jstor.org/stable/25471626>

141

Blake JA, Bult CJ. Beyond the Data Deluge: Data Integration and Bio-Ontologies. *Journal of Biomedical Informatics* 2006;**39**:314–20.<https://uoelibrary.idm.oclc.org/login?url=http://www.sciencedirect.com/science/article/pii/S1532046406000190>

142

Boyd D, Crawford K. Critical Questions for Big Data: Provocations for a Cultural, Technological and Scholarly Phenomenon. *Information, Communication & Society* 2012;**15**:662–79.<https://uoelibrary.idm.oclc.org/login?url=http://www.tandfonline.com/doi/abs/10.1080/1369118X.2012.678878>

143

Burian RM. Exploratory Experimentation and the Role of Histochemical Techniques in the Work of Jean Brachet, 1938-1952. *History and Philosophy of the Life Sciences* 1997;**19**:27–45.<https://uoelibrary.idm.oclc.org/login?url=http://www.jstor.org/stable/23332033>

144

Benson E. One Infrastructure, Many Global Visions: The Commercialization and Diversification of Argos, a Satellite-Based Environmental Surveillance System. *Social Studies of Science* 2012;**42**:843–68.<https://uoelibrary.idm.oclc.org/login?url=http://www.jstor.org/stable/41721363>

145

Canali S. Big Data, Epistemology and Causality: Knowledge In and Knowledge Out in EXPOsOMICS. *Big Data & Society* 2016;**3**.<https://uoelibrary.idm.oclc.org/login?url=http://journals.sagepub.com/doi/10.1177/2053951716669530>

146

Chicurel M. Bioinformatics: Bringing it All Together Technology Feature. *Nature* 2002;**419**



:751-7.<https://uoelibrary.idm.oclc.org/login?url=http://www.nature.com/articles/419751a>

147

Delbourgo J, Müller-Wille S. Focus: Listmania, Introduction. *Isis* 2012;**103**:710-5.<https://uoelibrary.idm.oclc.org/login?url=http://www.jstor.org/stable/10.1086/669045>

148

Davies G. Arguably Big Biology: Sociology, Spatiality and the Knockout Mouse Project. *BioSocieties* 2013;**8**:417-31.<https://uoelibrary.idm.oclc.org/login?url=http://link.springer.com/article/10.1057/biosoc.2013.25>

149

Elliott KC, Cheruvelil KS, Montgomery GM, et al. Conceptions of Good Science in Our Data-Rich World. *BioScience* 2016;**66**:880-9.<https://uoelibrary.idm.oclc.org/login?url=http://academic.oup.com/bioscience/article/66/10/880/2236154>

150

Floridi L. *The Philosophy of Information*. Oxford University Press 2011.  
<https://uoelibrary.idm.oclc.org/login?url=http://www.oxfordscholarship.com/view/10.1093/acprof:oso/9780199232383.001.0001/acprof-9780199232383>

151

Floridi L, Illari P. *The Philosophy of Information Quality*. Cham: : Springer 2014.  
<http://www.vlebooks.com/vleweb/product/openreader?id=Exeter&isbn=9783319071213>

152

Fox Keller E. Towards a Science of Informed Matter. *Studies in History and Philosophy of Biological and Biomedical Sciences* 2011;**42**:174-9.<https://uoelibrary.idm.oclc.org/login?url=http://www.sciencedirect.com/science/artic>

le/pii/S1369848610001172

153

Fujimura JH. The Practices of Producing Meaning in Bioinformatics. In: The Practices of Human Genetics. Dordrecht: : Kluwer Academic 1999. 49–87.<https://contentstore.cla.co.uk/secure/link?id=0eb6e4bb-fd99-e611-80c7-005056af4099>

154

Fry B. Visualizing Data: Exploring and Explaining Data with the Processing Environment. Beijing: : O'Reilly Media 2007. <http://www.vlebooks.com/vleweb/product/openreader?id=Exeter&isbn=9780596519308>

155

Garcia-Sancho M. Biology, Computing, and the History of Molecular Sequencing. Basingstoke: : Palgrave Macmillan 2012. <https://uoelibrary.idm.oclc.org/login?url=http://link.springer.com/book/10.1057%2F9780230370937>

156

Gilbert W. Towards a Paradigm Shift in Biology. *Nature* 1991;**349**:99–99.<https://uoelibrary.idm.oclc.org/login?url=http://www.nature.com/articles/349099a0.pdf>

157

Kitchin R. The Data Revolution: Big Data, Open Data, Data Infrastructures & Their Consequences. London: : SAGE Publications Ltd 2014. <https://uoelibrary.idm.oclc.org/login?url=http://methods.sagepub.com/book/the-data-revolution>

158

Leonelli S. Introduction: Making Sense of Data-Driven Research in the Biological and Biomedical Sciences. *Studies in History and Philosophy of Biological and Biomedical*

Sciences 2012;**43**

:1–3.<https://uoelibrary.idm.oclc.org/login?url=http://www.sciencedirect.com/science/article/pii/S136984861100077X>

159

Mittelstadt BD, Floridi L. The Ethics of Biomedical Big Data. 1st ed. 2016 edition. Cham: : Springer 2016.

<http://www.vlebooks.com/vleweb/product/openreader?id=Exeter&isbn=9783319335254>

160

O'Malley MA, Elliott KC, Haufe C, et al. Philosophies of Funding. Cell 2009;**138**

:611–5.<https://uoelibrary.idm.oclc.org/login?url=http://www.sciencedirect.com/science/article/pii/S0092867409009714>

161

O'Malley MA, Soyer OS. The Roles of Integration in Molecular Systems Biology. Studies in History and Philosophy of Biological and Biomedical Sciences 2012;**43**

:58–68.<https://uoelibrary.idm.oclc.org/login?url=http://www.sciencedirect.com/science/article/pii/S1369848611000823>

162

Rhee SY. Carpe Diem. Retooling the 'Publish or Perish' Model into the 'Share and Survive' Model. Plant Physiology 2004;**134**

:543–7.<https://uoelibrary.idm.oclc.org/login?url=http://www.jstor.org/stable/4281585>

163

The Royal Society. Science as an Open Enterprise: Final Report.

2012.<https://royalsociety.org/policy/projects/science-public-enterprise/Report/>

164

Rubin DL, Lewis SE, Mungall CJ, et al. The National Center for Biomedical Ontology:

Advancing Biomedicine Through Structured Organization of Scientific Knowledge. OMICS: A Journal of Integrative Biology 2006;**10**

:185–98.<https://www.liebertpub.com/doi/abs/10.1089/omi.2006.10.185>

165

Stevens H. *Life Out of Sequence: A Data-Driven History of Bioinformatics*. Chicago, Ill: : The University of Chicago Press 2013.

<https://ebookcentral.proquest.com/lib/exeter/detail.action?docID=1377287>

166

Vickers J. The Problem of Induction. *The Stanford Encyclopedia of Philosophy* Published Online First: 2009.<http://plato.stanford.edu/archives/spr2009/entries/induction-problem>

167

Dupré J. Chapter 5: Human Nature: A Process Perspective. In: *Why We Disagree About Human Nature*. Oxford: : Oxford University Press 2018.

92–107.<https://contentstore.cla.co.uk/secure/link?id=2a09c4b2-f980-e811-80cd-005056af4099>

168

Allen GE. The social and economic origins of genetic determinism: A case history of the American Eugenics Movement, 1900–1940 and its lessons for today. *Genetica* 1997;**99**

:77–88.<https://uoelibrary.idm.oclc.org/login?url=http://link.springer.com/article/10.1023/A:1018396529332>

169

Griffiths P. 'The Distinction Between Innate and Acquired Characteristics'. *The Stanford Encyclopedia of Philosophy* Published Online First:

2009.<http://plato.stanford.edu/entries/innate-acquired/>

170

Keller EF. *The Mirage of a Space Between Nature and Nurture*. Durham, NC: : Duke University Press 2010.

[https://exeter.primo.exlibrisgroup.com/discovery/fulldisplay?docid=alma991008369919707446&context=L&vid=44UOEX\\_INST:default](https://exeter.primo.exlibrisgroup.com/discovery/fulldisplay?docid=alma991008369919707446&context=L&vid=44UOEX_INST:default)

171

Griffiths PE, Stotz K. Chapter 5 - 'Gene'. In: The Cambridge Companion to the Philosophy of Biology. Cambridge: : Cambridge University Press 2007. 85-102. [https://exeter.primo.exlibrisgroup.com/discovery/fulldisplay?docid=alma991015275109707446&context=L&vid=44UOEX\\_INST:default](https://exeter.primo.exlibrisgroup.com/discovery/fulldisplay?docid=alma991015275109707446&context=L&vid=44UOEX_INST:default)

172

Rheinberger H-J,  
Mu

..  
Iler-Wille S. The Gene: From Genetics to Postgenomics. Chicago: : The University of Chicago Press 2017.

173

Johannsen W. 'The Genotype Conception of Heredity'. The American Naturalist 1911;**45**:129-59. <https://uoelibrary.idm.oclc.org/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=edsjsr&AN=edsjsr.2455747&site=eds-live&scope=sit>e

174

Amundson R. The Changing Role of the Embryo in Evolutionary Thought. Cambridge University Press 2005. [https://exeter.primo.exlibrisgroup.com/discovery/fulldisplay?docid=alma991003244789707446&context=L&vid=44UOEX\\_INST:default](https://exeter.primo.exlibrisgroup.com/discovery/fulldisplay?docid=alma991003244789707446&context=L&vid=44UOEX_INST:default)

175

Bechtel W. Discovering Cell Mechanisms: The Creation of Modern Cell Biology. Cambridge University Press 2006. [https://exeter.primo.exlibrisgroup.com/discovery/fulldisplay?docid=alma991003215209707446&context=L&vid=44UOEX\\_INST:default](https://exeter.primo.exlibrisgroup.com/discovery/fulldisplay?docid=alma991003215209707446&context=L&vid=44UOEX_INST:default)

176

Beurton PJ, Falk R, Rheinberger H-J. The Concept of the Gene in Development and Evolution. Cambridge University Press 2000. [https://exeter.primo.exlibrisgroup.com/discovery/fulldisplay?docid=alma991003309559707446&context=L&vid=44UOEX\\_INST:default](https://exeter.primo.exlibrisgroup.com/discovery/fulldisplay?docid=alma991003309559707446&context=L&vid=44UOEX_INST:default)

177

Burian RM. 'Unification and Coherence as Methodological Objectives in the Biological Sciences'. *Biology & Philosophy* 1993;**8**:301–18. <https://uoelibrary.idm.oclc.org/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=phl&AN=PHL1238615&site=eds-live&scope=site>

178

Dawkins R. *The Selfish Gene*. 30th anniversary ed. Oxford: : Oxford University Press 2006. <http://lib.myilibrary.com/browse/open.asp?id=87017&entityid=https://elibrary.exeter.ac.uk/idp/shibboleth>

179

Fagan MB. *Philosophy of Stem Cell Biology: Knowledge in Flesh and Blood*. Basingstoke: : Palgrave Macmillan 2013. <http://www.vlebooks.com/vleweb/product/openreader?id=Exeter&isbn=9781137296023>

180

Falk R. *Genetic Analysis: A History of Genetic Thinking*. Cambridge University Press 2009. <https://uoelibrary.idm.oclc.org/login?url=http://www.cambridge.org/core/books/genetic-analysis/A37A6BD3657B8AC2B6B1C12F33D8BC4C>

181

Gayon J. *Darwinism's Struggle for Survival: Heredity and the Hypothesis of Natural Selection*. Cambridge: : Cambridge University Press 1998.

182

Griffiths PE. *Genetic Information: A Metaphor in Search of a Theory*. *Philosophy of Science* 2001;**68**:394–412. <https://uoelibrary.idm.oclc.org/login?url=http://www.jstor.org/stable/3080926>

183

Griffiths PE, Gray RD. Chapter 19: The Developmental Systems Perspective: Organism-Environment Systems as Units of Evolution. In: Phenotypic Integration: Studying the Ecology and Evolution of Complex Phenotypes. Oxford, England: : Oxford University Press 2004.  
409–31.<https://contentstore.cla.co.uk/secure/link?id=c4af4450-d296-e611-80c7-005056af4099>

184

Griffiths P, Machery E, Linquist S. The Vernacular Concept of Innateness. *Mind & Language* 2009;**24**:605–30.<https://uoelibrary.idm.oclc.org/login?url=http://onlinelibrary.wiley.com/doi/10.1111/1/j.1468-0017.2009.01376.x/full>

185

Griffiths P, Stotz K. *Genetics and Philosophy: An Introduction*. Cambridge University Press 2013.  
<https://uoelibrary.idm.oclc.org/login?url=http://www.cambridge.org/core/books/genetics-and-philosophy/F3255AB9D97A5736BA3F621194CEC542>

186

Griffiths PE, Tabery J. Chapter 3: Developmental Systems Theory: What Does it Explain and How Does it Explain it? In: Lerner RM, Benson JB, eds. *Embodiment and Epigenesis: Theoretical and Methodological Issues in Understanding the Role of Biology within the Relational Developmental System, Part A: Philosophical, Theoretical, and Biological Dimensions*. Amsterdam: : Academic Press 2013.  
65–94.<http://www.vlebooks.com/Vleweb/Product/Index/410382?page=0>

187

Jacob F. *The Logic of Life: A History of Heredity*. Princeton, NJ: : Princeton University Press 1973.

188

Jablonka E, Lamb MJ. *Epigenetic Inheritance and Evolution: The Lamarckian Dimension*. Oxford: : Oxford University Press 1995.

189

Kay LE. Who Wrote the Book of Life?: A History of the Genetic Code. Stanford: : Stanford University Press 2000.

190

Leonelli S. Chapter 10: Understanding in Biology: The Impure Nature of Biological Knowledge. In: Scientific Understanding: Philosophical Perspectives. University of Pittsburgh Press 2009.  
189–209.<https://uoelibrary.idm.oclc.org/login?url=http://www.jstor.org/stable/j.ctt9qh59s.13>

191

Rose S, Kamin LJ, Lewontin RC. Not in Our Genes: Biology, Ideology and Human Nature. Harmondsworth: : Penguin 1984.

192

Mameli M, Bateson P. Innateness and the Sciences. *Biology & Philosophy* 2006;**21**:155–88.<https://uoelibrary.idm.oclc.org/login?url=http://link.springer.com/article/10.1007/s10539-005-5144-0>

193

Mendelsohn JA. Lives of the Cell. *Journal of the History of Biology* 2003;**36**:1–37.<https://uoelibrary.idm.oclc.org/login?url=http://www.jstor.org/stable/4331779>

194

Moss L. What Genes Can't Do. Cambridge, Mass: : MIT Press 2003.  
<https://uoelibrary.idm.oclc.org/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=nlebk&AN=78120&site=ehost-live>

195

Olby RC. Origins of Mendelism. Constable 1966.



196

O'Malley MA, Müller-Wille S. The Cell as Nexus: Connections Between the History, Philosophy and Science of Cell Biology. *Studies in History and Philosophy of Biological and Biomedical Sciences* 2010;**41**:169–71. <https://uoelibrary.idm.oclc.org/login?url=http://www.sciencedirect.com/science/article/pii/S1369848610000397>

197

Reynolds A. The Theory of the Cell State and the Question of Cell Autonomy in Nineteenth and Early Twentieth-Century Biology. *Science in Context* 2007;**20**:71–95. <https://uoelibrary.idm.oclc.org/login?url=http://www.cambridge.org/core/journals/science-in-context/article/theory-of-the-cell-state-and-the-question-of-cell-autonomy-in-nineteenth-and-early-twentiethcentury-biology/786F57CF546A1D3ABB607B8C8F857B50>

198

Richardson SS. *Sex Itself: The Search for Male and Female in the Human Genome*. Chicago: : University of Chicago Press 2013. <https://ebookcentral.proquest.com/lib/exeter/detail.action?docID=1431257>

199

Johns Schloegel J, Schmidgen H. General Physiology, Experimental Psychology and Evolutionism. *Isis* 2002;**93**:614–45. <https://uoelibrary.idm.oclc.org/login?url=http://www.jstor.org/stable/10.1086/375954>

200

Stotz K, Griffiths PE, Knight R. How Biologists Conceptualize Genes: An Empirical Study. *Studies in History and Philosophy of Biological and Biomedical Sciences* 2004;**35**:647–73. <https://uoelibrary.idm.oclc.org/login?url=http://www.sciencedirect.com/science/article/pii/S136984860400069X>

201

Stotz K, Griffiths P. Genes: Philosophical Analyses Put to the Test. *History and Philosophy of the Life Sciences* 2004;**26**:5–28. <https://uoelibrary.idm.oclc.org/login?url=http://www.jstor.org/stable/23333378>

202

Waters CK. What Was Classical Genetics? *Studies in History and Philosophy of Science* 2004;**35**:783–809.<https://uoelibrary.idm.oclc.org/login?url=http://www.sciencedirect.com/science/article/pii/S003936810400086X>

203

Frigg R, Hartmann S. Models in science. *The Stanford Encyclopedia of Philosophy* Published Online First: 2012.<http://plato.stanford.edu/entries/models-science/>

204

Levins R. The Strategy of Model Building in Population Biology. *American Scientist* 1966;**54**:421–31.<https://uoelibrary.idm.oclc.org/login?url=http://www.jstor.org/stable/27836590>

205

Ankeny RA, Leonelli S. What's So Special About Model Organisms? *Studies in History and Philosophy of Science Part A* 2011;**42**:313–23.<https://uoelibrary.idm.oclc.org/login?url=http://www.sciencedirect.com/science/article/pii/S0039368110001184>

206

Morrison M, Morgan MS. Chapter 2: Models as Mediating Instruments. In: Morgan MS, Morrison M, eds. *Models as Mediators: Perspectives on Natural and Social Sciences*. Cambridge: : Cambridge University Press 1999. 10–37.<https://uoelibrary.idm.oclc.org/login?url=http://www.cambridge.org/core/books/models-as-mediators/models-as-mediating-instruments/10737C6DD4744A65E4B5B89B3D489B21>

207

Weber M. Chapter 3: Walking on the Chromosome: *Drosophila* and the Molecularization of Development. In: *From Molecular Genetics to Genomics: The Mapping Cultures of Twentieth-Century Genetics*. London: : Routledge 2004. 63–78.<https://contentstore.cla.co.uk/secure/link?id=024b253e-9197-e611-80c7-005056af4099>

208

Ankeny RA, Leonelli S. Organisms in Experimental Research. In: Handbook of the Historiography of Biology. Cham: : Springer 2019. 1-25. [https://uoelibrary.idm.oclc.org/login?url=http://link.springer.com/referenceworkentry/10.1007/978-3-319-74456-8\\_15-1](https://uoelibrary.idm.oclc.org/login?url=http://link.springer.com/referenceworkentry/10.1007/978-3-319-74456-8_15-1)

209

Bailer-Jones DM. Scientific Models in Philosophy of Science. University of Pittsburgh Press 2009. <https://uoelibrary.idm.oclc.org/login?url=http://www.jstor.org/stable/j.ctt5vkdnq>

210

de Chadarevian S. Of Worms and Programmes: Caenorhabditis Elegans and the Study of Development. Studies in History and Philosophy of Biological and Biomedical Sciences 1998;**29**:81-105. <https://uoelibrary.idm.oclc.org/login?url=http://www.sciencedirect.com/science/article/pii/S1369848698000041>

211

de Chadarevian S. Chapter 12: Models and the Making of Molecular Biology. In: Models: The Third Dimension of Science. Stanford, Calif: : Stanford University Press 2004. 339-68. <https://contentstore.cla.co.uk/secure/link?id=c0781cd8-9597-e611-80c7-005056af4099>

212

Craver CF, Darden L. In Search of Mechanisms: Discoveries Across the Life Sciences. University of Chicago Press 2013.

213

Creager ANH. The Life of a Virus: Tobacco Mosaic Virus as an Experimental Model, 1930-1965. Chicago: : University of Chicago Press 2002.

214

Davies G. Captivating Behaviour: Mouse Models, Experimental Genetics and Reductionist Returns in the Neurosciences. *The Sociological Review* 2010;**58**:53–72.<https://uoelibrary.idm.oclc.org/login?url=http://onlinelibrary.wiley.com/doi/10.1111/j.1467-954X.2010.01911.x/full>

215

Davies G. What is a Humanized Mouse? Remaking the Species and Spaces of Translational Medicine. *Body & Society* 2012;**18**:126–55.<https://uoelibrary.idm.oclc.org/login?url=http://journals.sagepub.com/doi/full/10.1177/1357034X12446378>

216

French S, Ladyman J. Reinflating the Semantic Approach. *International Studies in the Philosophy of Science* 1999;**13**:103–21.<https://uoelibrary.idm.oclc.org/login?url=http://www.tandfonline.com/doi/abs/10.1080/02698599908573612>

217

Godfrey-Smith P. The Strategy of Model-Based Science. *Biology & Philosophy* 2010;**21**:725–40.<https://uoelibrary.idm.oclc.org/login?url=http://link.springer.com/article/10.1007%2Fs10539-006-9054-6>

218

Griesemer JR. Material Models in Biology. *PSA: Proceedings of the Biennial Meeting of the Philosophy of Science Association* 1990;**1990**:79–93.<https://uoelibrary.idm.oclc.org/login?url=http://www.jstor.org/stable/193060>

219

Knuuttila T. Models, Representation and Mediation. *Philosophy of Science* 2005;**72**:1260–71.<https://uoelibrary.idm.oclc.org/login?url=http://www.jstor.org/stable/10.1086/508124>

220

Meunier R. Stages in the Development of a Model Organism as a Platform for Mechanistic

Models in Developmental Biology: Zebrafish, 1970–2000. *Studies in History and Philosophy of Biological and Biomedical Sciences* 2012;**43**:522–31.<https://uoelibrary.idm.oclc.org/login?url=http://www.sciencedirect.com/science/article/pii/S1369848611001403>

221

Morgan MS. Chapter 1: Modelling as a Method of Enquiry. In: *The World in the Model: How Economists Work and Think*. Cambridge University Press 2012. 1–43.<https://uoelibrary.idm.oclc.org/login?url=http://www.cambridge.org/core/books/world-in-the-model/modelling-as-a-method-of-enquiry/5592F5DADCD2785B106FC69CA01D498D>

222

Morgan MS, Morrison M. *Models as Mediators: Perspectives on Natural and Social Sciences*. Cambridge University Press 1999.  
<https://uoelibrary.idm.oclc.org/login?url=http://www.cambridge.org/core/books/models-as-mediators/FBB3EA4AEC824AD6F1E6C650CAE3AE>

223

Nelson NC. *Model Behavior: Animal Experiments, Complexity and the Genetics of Psychiatric Disorders*. Chicago, IL: : University of Chicago Press 2018.  
<https://ebookcentral.proquest.com/lib/exeter/detail.action?docID=5101436>

224

Suárez M. Theories, Models and Representations. In: *Model-Based Reasoning in Scientific Discovery*. New York, NY: : Kluwer Academic/Plenum Publ 1999. 75–83.<https://contentstore.cla.co.uk/secure/link?id=7051aeb2-ec99-e611-80c7-005056af4099>

225

Suárez M. An Inferential Conception of Scientific Representation. *Philosophy of Science* 2004;**71**:767–79.<https://uoelibrary.idm.oclc.org/login?url=http://www.jstor.org/stable/10.1086/421415>

226

Weisberg M. Who is a Modeler? *The British Journal for the Philosophy of Science* 2007;**58**:207–33.<https://uoelibrary.idm.oclc.org/login?url=http://www.jstor.org/stable/30115224>

227

Weisberg M. Forty Years of 'The Strategy': Levins on Model Building and Idealization. *Biology & Philosophy* 2006;**21**:623–45.<https://uoelibrary.idm.oclc.org/login?url=http://link.springer.com/article/10.1007/s10539-006-9051-9>

228

Weisberg M. *Simulation and Similarity: Using Models to Understand the World*. Oxford University Press 2013.  
<https://uoelibrary.idm.oclc.org/login?url=http://www.oxfordscholarship.com/view/10.1093/acprof:oso/9780199933662.001.0001/acprof-9780199933662>

229

Kohler RE. Systems of production: *Drosophila*, *neurospora*, and biochemical genetics. *Historical Studies in the Physical and Biological Sciences* 1991;**22**:87–130.<https://uoelibrary.idm.oclc.org/login?url=http://www.jstor.org/stable/27757674>

230

Rheinberger H-J. From microsomes to ribosomes: 'Strategies' of 'representation'. *Journal of the History of Biology* 1995;**28**:49–89.<https://uoelibrary.idm.oclc.org/login?url=http://www.jstor.org/stable/4331335>

231

Weber M. Chapter 25: Experimentation. In: *A Companion to the Philosophy of Biology*. Malden, MA: : Blackwell Pub 2008. 472–88.<https://ebookcentral.proquest.com/lib/exeter/reader.action?docID=470333&pg=500>

232

Bernard C. *Introduction to the Study of Experimental Medicine*. New York: : Dover 1985.

233

Burian RM. Technique, Task Definition and the Transition From Genetics to Molecular Genetics: Aspects of the Work on Protein Synthesis in the Laboratories of J. Monod and P. Zamecnik. *Journal of the History of Biology* 1993;**26**:387-407. <https://uoelibrary.idm.oclc.org/login?url=http://www.jstor.org/stable/4331278>

234

Radder H. *The Philosophy of Scientific Experimentation*. Pittsburgh, PA: : University of Pittsburgh Press 2003. <https://uoelibrary.idm.oclc.org/login?url=http://www.jstor.org/stable/10.2307/j.ctt5hjsnf>

235

Burian R. *The Epistemology of Development, Evolution, and Genetics*. Cambridge University Press 2004. <https://uoelibrary.idm.oclc.org/login?url=http://www.cambridge.org/core/books/epistemology-of-development-evolution-and-genetics/8E670690F1F342968730B17CF769EA41#>

236

De Chadarevian S. Laboratory Science Versus Country-House Experiments. The Controversy Between Julius Sachs and Charles Darwin. *The British Journal for the History of Science* 1996;**29**:17-41. <https://uoelibrary.idm.oclc.org/login?url=http://www.jstor.org/stable/4027510>

237

Chadarevian S de. *Designs For Life: Molecular Biology After World War II*. Cambridge: : Cambridge University Press 2002.

238

Coleman W, Holmes FL. *The Investigative Enterprise: Experimental Physiology in Nineteenth-Century Medicine*. Berkeley, Calif: : University of California Press 1988.

239

Endy D. Foundations for Engineering Biology. *Nature* 2005;**438**

:449-53.<https://uoelibrary.idm.oclc.org/login?url=http://www.nature.com/articles/nature04342>

240

Holmes FL. *Investigative Pathways: Patterns and Stages in the Careers of Experimental Scientists*. New Haven, Conn: : Yale University Press 2004.

241

Keller EF. *Making Sense of Life: Explaining Biological Development with Models, Metaphors and Machines*. Cambridge, MA: : Harvard University Press 2002.  
<http://www.vlebooks.com/vleweb/product/openreader?id=Exeter&isbn=9780674039445>

242

Kohler RE. *Lords of the Fly: Drosophila Genetics and the Experimental Life*. Chicago: : University of Chicago Press 1994.

243

Kroes P. *Technology and Science-Based Heuristics*. In: *New Directions in the Philosophy of Technology*. Dordrecht: : Kluwer 1995.  
17-39.<https://contentstore.cla.co.uk/secure/link?id=d4eaddf3-eb99-e611-80c7-005056af4099>

244

Landecker H. *Culturing life: How Cells Became Technologies*. Harvard University Press 2007.  
<https://uoelibrary.idm.oclc.org/login?url=http://quod.lib.umich.edu/cgi/t/text/text-idx?c=acs;idno=heb09113>

245

Lenoir T. *The Strategy of Life: Teleology and Mechanics in Nineteenth-Century German Biology*. Chicago: : University of Chicago Press 1989.



246

Olby RC. The Path to the Double Helix: The Discovery of DNA. New York: : Dover Publications 1994.

247

O'Malley MA, Powell A, Davies JF, et al. Knowledge-Making Distinctions in Synthetic Biology. *BioEssays* 2008;**30**:57-65.<https://uoelibrary.idm.oclc.org/login?url=http://onlinelibrary.wiley.com/doi/10.1002/bies.20664/full>

248

Pauly PJ. Controlling Life: Jacques Loeb and the Engineering Ideal in Biology. New York: : Oxford University Press 1987.  
<http://www.vlebooks.com/vleweb/product/openreader?id=Exeter&isbn=9780195364668>

249

Rheinberger H-J. Toward a History of Epistemic Things: Synthesizing Proteins in the Test Tube. Stanford, Calif: : Stanford University Press 1997.

250

Schmidgen H. Pictures, Preparations, and Living Processes: The Production of Immediate Visual Perception (Anschauung) in Late-19th-Century Physiology. *Journal of the History of Biology* 2004;**37**:477-513.<https://uoelibrary.idm.oclc.org/login?url=http://www.jstor.org/stable/4331897>

251

Weber M. Philosophy of Experimental Biology. Cambridge University Press 2004.  
<https://uoelibrary.idm.oclc.org/login?url=http://www.cambridge.org/core/books/philosophy-of-experimental-biology/F53C6D06123469E4C493CEE61BA0D127>

252

Müller-Wille S. The Dark Side of Evolution: Caprice, Deceit, Redundancy. *History and Philosophy of the Life Sciences* 2009;**31**

:183–99.<https://uoelibrary.idm.oclc.org/login?url=http://www.jstor.org/stable/23334442>

253

Day RL, Laland KN, Odling-Smee FJ. Rethinking Adaptation: The Niche-Construction Perspective. *Perspectives in Biology and Medicine* 2003;**46**:80–95.<https://uoelibrary.idm.oclc.org/login?url=http://muse.jhu.edu/article/38634>

254

O'Malley MA, Dupré J. Size doesn't matter: Towards a more inclusive philosophy of biology. *Biology & Philosophy* 2007;**22**:155–91.<https://uoelibrary.idm.oclc.org/login?url=http://link.springer.com/article/10.1007/s10539-006-9031-0>

255

Egerton FN. Changing Concepts of the Balance of Nature. *The Quarterly Review of Biology* 1973;**48**:322–50.<https://uoelibrary.idm.oclc.org/login?url=http://www.jstor.org/stable/2820544>

256

Plutynski A. Chapter 21: Ecology and the Environment. In: *The Oxford Handbook of Philosophy of Biology*. Oxford University Press 2008. 505–24.<https://uoelibrary.idm.oclc.org/login?url=http://www.oxfordhandbooks.com/view/10.1093/oxfordhb/9780195182057.001.0001/oxfordhb-9780195182057-e-022>

257

Wilson DS, Sober E. Reviving the Superorganism. *Journal of Theoretical Biology* 1989;**136**:337–56.<https://uoelibrary.idm.oclc.org/login?url=http://www.sciencedirect.com/science/article/pii/S0022519389801699>

258

Canguilhem G. The Development of the Concept of Biological Regulation in the Eighteenth and Nineteenth Centuries. In: *Ideology and Rationality in the History of the Life Sciences*. 1988. 81–102.<https://contentstore.cla.co.uk/secure/link?id=c03efb17-ffd7-e611-80c9-005056af4099>

259

Daston L, Vidal F. *The Moral Authority of Nature*. Chicago, Ill: : University of Chicago Press 2004.  
[https://exeter.primo.exlibrisgroup.com/discovery/fulldisplay?docid=alma991002185209707446&context=L&vid=44UOEX\\_INST:default](https://exeter.primo.exlibrisgroup.com/discovery/fulldisplay?docid=alma991002185209707446&context=L&vid=44UOEX_INST:default)

260

Dennett DC. *Darwin's Dangerous Idea: Evolution and the Meanings of Life*. London: : Penguin 1996.

261

Gilbert SF, Epel D. *Ecological Developmental Biology: Integrating Epigenetics, Medicine, and Evolution - An Integrated Approach to Embryology, Evolution, and Medicine*. Sunderland, Mass: : Sinauer Associates 2009.

262

Haraway D. *When Species Meet*. Minneapolis: : University of Minnesota Press 2008.  
<https://ebookcentral.proquest.com/lib/exeter/detail.action?docID=328400>

263

Hinchliffe S. *Geographies of Nature: Societies, Environments, Ecologies*. Los Angeles, Calif: : SAGE 2007.  
<http://www.vlebooks.com/vleweb/product/openreader?id=Exeter&isbn=9781848607491>

264

Jablonka E, Lamb MJ, Zeligowski A. *Evolution in Four Dimensions: Genetic, Epigenetic, Behavioral, and Symbolic Variation in the History of Life*. Revised edition. Cambridge, Massachusetts: : A Bradford Book 2014.  
<https://uoelibrary.idm.oclc.org/login?url=http://ebookcentral.proquest.com/lib/exeter/detail.action?docID=3339771>

265

Keller EF. *Refiguring Life: Metaphors of Twentieth-Century Biology*. New York: : Columbia University Press 1995.

266

Margulis L. *Symbiotic Planet: A New Look at Evolution*. 1st ed. New York: : Basic Books 1998. <https://ebookcentral.proquest.com/lib/exeter/detail.action?docID=679945>

267

Mu

ller-Wille S, Rheinberger H-J. Chapter 1: Heredity - The Formation of an Epistemic Space. In: *Heredity Produced: At the Crossroads of Biology, Politics and Culture, 1500-1870*. Cambridge, Mass: : MIT Press 2007. 3-34.<http://www.vlebooks.com/Vleweb/Product/Index/997468?page=0>

268

Odenbaugh J. Struggling with the Science of Ecology. *Biology & Philosophy* 2006;**21**:395-409.<https://uoelibrary.idm.oclc.org/login?url=http://link.springer.com/article/10.1007/s10539-005-4055-4>

269

Odling-Smee FJ, Laland KN, Feldman MW. *Niche Construction: The Neglected Process in Evolution*. Princeton University Press 2003. <https://uoelibrary.idm.oclc.org/login?url=http://www.jstor.org/stable/j.ctt24hqpd>

270

Okasha S. *Evolution and the Levels of Selection*. Oxford University Press 2006. <https://uoelibrary.idm.oclc.org/login?url=http://www.oxfordscholarship.com/view/10.1093/acprof:oso/9780199267972.001.0001/acprof-9780199267972>

271

Oyama S, Griffiths PE, Gray RD. *Cycles of Contingency: Developmental Systems and*

Evolution. Cambridge, MA: : MIT Press 2001.

272

Roughgarden J. Evolution's Rainbow: Diversity, Gender, and Sexuality in Nature and People . Berkeley: : University of California Press 2013.

<https://ebookcentral.proquest.com/lib/exeter/detail.action?docID=1375430>

273

Odenbaugh J. Conservation Biology. The Stanford Encyclopedia of Philosophy Published Online First: 2016.<https://plato.stanford.edu/entries/conservation-biology/>

274

Sarkar S. Ecology. The Stanford Encyclopedia of Philosophy Published Online First: 2005.<http://plato.stanford.edu/entries/ecology>

275

Schiebinger L. Nature's Body: Gender in the Making of Modern Science. Rutgers University Press 2004.

276

Schweber SS. Darwin and the Political Economists: Divergence of Character. Journal of the History of Biology 1980;**13**

:195–289.<https://uoelibrary.idm.oclc.org/login?url=http://www.jstor.org/stable/4330766>

277

Young RM. Darwin's Metaphor: Nature's Place in Victorian Culture. Cambridge: : Cambridge University Press 1985.

278

Reiss J, Ankeny RA. Philosophy of Medicine. The Stanford Encyclopedia of Philosophy Published Online First: 2016.<https://plato.stanford.edu/archives/sum2016/entries/medicine/>

279

Foucault M. Right of death and power over life. In: The Foucault Reader. Harmondsworth: : Penguin 1986.

258-72.<https://contentstore.cla.co.uk/secure/link?id=acf76f99-bf9a-e611-80c7-005056af4099>

280

Boniolo G. Chapter 1: Molecular Medicine: The Clinical Method Enters the Lab. In: Philosophy of Molecular Medicine: Foundational Issues in Research and Practice. New York : : Routledge, Taylor & Francis Group 2017.

15-34.<https://uoelibrary.idm.oclc.org/login?url=http://www.taylorfrancis.com/books/e/9781317378358/chapters/10.4324%2F9781315674162-8>

281

Boniolo G, Nathan MJ. Philosophy of Molecular Medicine: Foundational Issues in Research and Practice. New York : : Routledge, Taylor & Francis Group 2017.

<https://uoelibrary.idm.oclc.org/login?url=http://www.taylorfrancis.com/books/9781315674162>

282

Boorse C. Health as a Theoretical Concept. Philosophy of Science 1977;**44**

:542-73.<https://uoelibrary.idm.oclc.org/login?url=http://www.jstor.org/stable/186939>

283

Kingma E. Paracetamol, Poison, and Polio: Why Boorse's Account of Function Fails to Distinguish Health and Disease. The British Journal for the Philosophy of Science 2010;**61**

:241-64.<https://uoelibrary.idm.oclc.org/login?url=http://www.jstor.org/stable/40664348>

284

Lennox JG. Health as an Objective Value. Journal of Medicine and Philosophy 1995;**20**

:499-511.<https://uoelibrary.idm.oclc.org/login?url=http://academic.oup.com/jmp/article/20/5/499/924077/Health-as-an-Objective-Value>

285

Grene M. Philosophy of Medicine: Prolegomena to a Philosophy of Science. PSA: Proceedings of the Biennial Meeting of the Philosophy of Science Association 1976;**1976**:77–93.<https://uoelibrary.idm.oclc.org/login?url=http://www.jstor.org/stable/192374>

286

Amundson R. Against Normal Function. Studies in History and Philosophy of Biological and Biomedical Sciences 2000;**31**:33–53.<https://uoelibrary.idm.oclc.org/login?url=http://www.sciencedirect.com/science/article/pii/S1369848699000333>

287

Canguilhem G. The Normal and the Pathological. New York: : Zone Books 1989.

288

Canguilhem G, Geroulanos S, Meyers T. Writings on Medicine. Fordham University Press 2012. <https://uoelibrary.idm.oclc.org/login?url=http://www.jstor.org/stable/j.ctt1c84gs6>

289

Carel H. Illness: The Cry of the Flesh. Revised edition. London: : Routledge 2013. <https://www.taylorfrancis.com/books/illness-havi-carel/10.4324/9781315487410>

290

Cunningham A, Williams P. The Laboratory Revolution in Medicine. Cambridge: : Cambridge University Press 1992.

291

Engelhardt HT. The Philosophy of Medicine: Framing the Field. Dordrecht: : Kluwer Acad. Publ 2000.

292

Fortun M, Mendelsohn E. The Practices of Human Genetics. Dordrecht: : Kluwer Academic 1999.

293

Foucault M. The Birth of the Clinic: An Archaeology of Medical Perception. London: : Routledge 2003.  
<http://www.vlebooks.com/vleweb/product/openreader?id=Exeter&isbn=9781135864767>

294

Foucault M, Bertani M. Society Must be Defended: Lectures at the Collège de France, 1975-76: Lectures at the College De France, 1975 76. London: : Penguin 2004.

295

Gannett L. Chapter 19: Genes and Society. In: The Oxford Handbook of Philosophy of Biology. New York: : Oxford University Press 2008.  
451-77.<https://uoelibrary.idm.oclc.org/login?url=http://www.oxfordhandbooks.com/view/10.1093/oxfordhb/9780195182057.001.0001/oxfordhb-9780195182057-e-020>

296

Gannett L. The Biological Reification of Race. The British Journal for the Philosophy of Science 2004;**55**  
:323-45.<https://uoelibrary.idm.oclc.org/login?url=http://www.jstor.org/stable/3541694>

297

Hacking I. Genetics, Biosocial Groups and the Future of Identity. Daedalus 2006;**135**  
:81-95.<https://uoelibrary.idm.oclc.org/login?url=http://www.jstor.org/stable/20028075>

298

Longino HE, Keller EF. Feminism and Science. Oxford: : Oxford University Press 1996.

299



Kevles DJ. In the Name of Eugenics: Genetics and the Uses of Human Heredity. Cambridge, Mass: : Harvard University Press 1995.

300

Koenig BA, Lee SS-J, Richardson SS. Revisiting Race in a Genomic Age. New Brunswick, N.J.: : Rutgers University Press 2008.

301

Magnus D. Chapter 23: The Concept of Genetic Disease. In: Health, Disease and Illness: Concepts in Medicine. Washington, D.C.: : Georgetown University Press 2004. 233-42.

302

Grmek MD. Pathological Realities: Essays on Disease, Experiments, and History. New York, NY: : Fordham University Press 2018. <https://www.jstor.org/stable/j.ctv75d9nq>

303

Paul DB. Controlling Human Heredity: 1865 to the Present. Atlantic Highlands, N.J.: : Humanities Press 1995.

304

Sunder Rajan K. Pharmocracy: Value, Politics, and Knowledge in Global Biomedicine. Durham, [North Carolina]: : Duke University Press 2017.  
<http://www.vlebooks.com/vleweb/product/openreader?id=Exeter&isbn=9780822373285>

305

Reardon J. Race to the Finish: Identity and Governance in an Age of Genomics. Princeton, NJ: : Princeton University Press 2005.  
<https://uoelibrary.idm.oclc.org/login?url=http://www.jstor.org/stable/10.2307/j.ctt7t00f>

306

Root M. The use of race in medicine as a proxy for genetic differences. *Philosophy of Science* 2003;**70**:1173–83.<https://uoelibrary.idm.oclc.org/login?url=http://www.jstor.org/stable/10.1086/377398>

307

Schaffner KF. Philosophy of medicine. In: *Introduction to the Philosophy of Science: A Text*. Englewood Cliffs, NJ: : Prentice Hall 1992. 310–45.

308

Temkin O. Chapter 29: Health and disease. In: *The Double Face of Janus and Other Essays in the History of Medicine*. Baltimore, Md: : Johns Hopkins University Press 2006. 419–40.<https://contentstore.cla.co.uk/secure/link?id=ea5e0181-cb9a-e611-80c7-005056af4099>

309

UNESCO. *The Race Question in Modern Science: Results of an Inquiry*. 1952.<http://unesdoc.unesco.org/images/0007/000733/073351eo.pdf>