

CURRICULUM VITAE – MARCEL WEBER

Present appointments

Full Professor, Department of Philosophy, University of Geneva

Qualifications

Habilitation in Philosophy, Leibniz University Hannover, 2002

Ph.D. in Philosophy (*summa cum laude*), University of Konstanz, 1996

Master of Science in Molecular Biology (*Diplom Biologie II*), University of Basel, 1987

Previous appointments

2019	Visiting Research Professor, Department of Logic and Philosophy of Science, University of California, Irvine (Fall Quarter 2019)
2009-2011	Full Professor (W3), Department of Philosophy, University of Konstanz
2004-2009	SNSF-Professor, Science Studies Program and Department of Philosophy, University of Basel
2008	Visiting Professor, Department of Zoology, University of Zurich
2007-2009	Visiting Professor, Department of Philosophy, University of Geneva
2003-2004	Chair <i>ad interim</i> , Center for Philosophy and Ethics of Science, Leibniz University Hannover
2002/03	Visiting Professor, Institute for Philosophy, Humboldt University Berlin
2001	Visiting Researcher, Max-Planck-Institute for the History of Science, Berlin
1997-2002	Lecturer, Center for Philosophy and Ethics of Science, Leibniz University Hannover
1996-97	Postdoctoral Fellow, Minnesota Centre for Philosophy of Science, University of Minnesota, Minneapolis
1993-96	Research Assistant to Prof. Werner Arber, Department of Microbiology, Biozentrum, University of Basel
1988-89	Research Assistant to Prof. Gottfried Schatz, Department of Biochemistry, Biozentrum, University of Basel

Editorships

2011-2019	Editor, <i>dialectica</i>
2012-2015	Associate Editor, <i>The British Journal for the Philosophy of Science</i>

Other Services to the Profession

2013-2020	Member of the Fellowship Committee of the SNSF
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University offices

2010-2011	Head of the Department of Philosophy, University of Konstanz
2010-2011	Vice Dean of the Humanities Section, University of Konstanz
2015-2019	Head of the Department of Philosophy, University of Geneva

Honours

Since 2012 Member of the German National Academy of Sciences Leopoldina

Ethics committees

Since 2016 Member of the Commission on Genome Editing, German National Academy of Sciences Leopoldina

Research grants

1996-1997 "Theories, Models and Laws in Ecology", Nachwuchsstipendium für angehende Forscher, Swiss National Science Foundation, CHF 36'000

2004-2008 "Quality Assessment, Expertise, and Decision-making in Scientific Research: Criteria, Procedures, and Social Organization", Swiss National Science Foundation, CHF 1'108'923 (SNF Professorship)

2008-2010 "Quality Assessment, Expertise, and Decision-making in Scientific Research: Disciplinary Diversity and Epistemic Pluralism", Swiss National Science Foundation, CHF 678'986 (SNF-Professorship)

2008-2011 SNF-prodoc "Human Life", with Prof. Sebastian Rödl, Prof. Hans-Bernhard Schmid, Prof. Monika Betzler, Prof. Emil Angehrn, Prof. Angelika Krebs, CHF 355'932

2008-2011 "Mind and Life", with Prof. Sebastian Rödl, research module for SNF-prodoc "Human Life", CHF 376'650

2010-2011 Director of the research initiative "What if? On the Meaning, Epistemology and Scientific Relevance of Counterfactual Claims and Thought Experiments" (goal: establishment of an interdisciplinary DFG Research Group), supported by the research fund and *Zukunftskolleg* of the University of Konstanz, EUR 173'000. DFG Research Group approved 2012-2015, EUR 1'900'000

2012-2015 "Counterfactual Reasoning in Biology", 2 Candocs, Swiss National Science Foundation, CHF 328'680

2013-2016 "Biological Knowledge Through Modeling and Engineering", 1 Postdoc, Swiss National Science Foundation, CHF 319'821

2013-2016 "Grounding – Metaphysics, Science, and Logic", Swiss NSF *sinergia* network project, with Prof. Fabrice Correia (Neuchâtel, Director) and Prof. Benjamin Schnieder (Hamburg), Total budget CHF 1'000'000

2015-2018 "Simulation and Counterfactual Reasoning in Neuroscience", 1 Candoc, Swiss National Science Foundation, CHF 179'244

2015-2018 "Inferentialism, Bayesianism, and Scientific Explanation", DACH-project with Prof. Stephan Hartmann, Munich Center for Mathematical Philosophy, LMU Munich, 1 Postdoc, Swiss National Science Foundation (Lead Agency) and Deutsche Forschungsgemeinschaft, CHF 111'805

2015-2018 "From Biological Practice to Scientific Metaphysics", 1 Postdoc, 1 Candoc, John Templeton Foundation, USD 593'897

2017-2020 "Mechanistic Constitution in the Special Sciences", 1 Postdoc, Swiss National Science Foundation, CHF 311'281

Organization of conferences

2020 Co-chair of the Program Committee, 6th European Advanced School in the Philosophy of the Life Sciences, Konrad Lorenz Institute for Evolution and Cognition Research, Klosterneuburg, 7-11 September 2020. Replaced by a week of online mentoring sessions due to COVID-19

- 2019 Co-Chair of the Local Organizing Committee, EPSA 2019, the 7th Biennial Conference of the European Philosophy of Science Association, University of Geneva, 11-14 September
- 2019 Co-organizer (with Lorenzo Casini, Dunja Seselja and Stephan Hartmann), workshop "Biases in Science", Munich Center for Mathematical Philosophy, LMU Munich, 10-12 April 2019
- 2018 Co-organizer (with Alan Love, William Wimsatt and C. Kenneth Waters), Summer Institute "From Biological Practice to Scientific Metaphysics", Taipei, Taiwan, 20-27 July
- 2018 Co-organizer (with Lorenzo Casini, Reuben Stern and Stephan Hartmann), workshop "Explanatory Power", University of Geneva, 14-15 June
- 2017 Organizer, workshop "Bordeaux-Geneva workshop in Philosophy of Biology", Geneva, 10-11 October
- 2017 Co-Organizer (with Alan Love, William Wimsatt and C. Kenneth Waters), Summer Institute "Practices of Individuation and Classification in Science", Calgary, Alberta, 18 June - 1 July
- 2017 Co-Organizer (with Michal Hladky and Guillaume Schlaepfer), "Simulation and Thought Experiment", University of Geneva, 8-9 June
- 2016 Member of the program committee, PSA 2016 (Biennial Meeting of the Philosophy of Science Association), Atlanta, 3-5 November
- 2016 Member of the local organizing committee, Second Meeting of the Society for the Metaphysics of Science (SMS2), University of Geneva, 15-17 September
- 2016 Co-organizer (with Lorenzo Casini), workshop "Ground in Philosophy of Science", University of Geneva, 13-14 September
- 2016 Co-organizer (with Alan Love, William Wimsatt and C. Kenneth Waters), Summer Institute "Reconceiving the Success of Science", Basel, 1-11 August 2016
- 2015 Co-organizer (with Lorenzo Casini), Workshop "Ground in Biology", Université de Genève, 19-20 June 2015
- 2014 Co-organizer (with Andrea Loettgers), Workshop "Toward a More Integrated View of Modeling, Experimentation and Simulation", Université de Genève, 27-28 June 2014
- 2013 Organizer, workshop, "Organisms, Machines, and Mechanisms", Université de Genève, 5-6 December 2013
- 2013 Organizer, Workshop "The Question 'What if?' in the Sciences and the Humanities", Université de Genève, 4-5 July 2013
- 2008-2013 Team coordinator, "Philosophy of Natural and Life Sciences", European Science Foundation Research Networking Programme (ESF-NP) "Philosophy of Science in a European Perspective"
- 2012 Co-organizer, Opening Conference of the Research Group "What of? On the Meaning, Epistemology and Scientific Relevance of Counterfactual Claims and Thought Experiments, 25-27 October, University of Konstanz
- 2012 Co-organizer (with Anita Konzelmann Ziv and Hans-Bernhard Schmid), workshop "Walking with Rousseau. Group Attitudes Between Aggregation and Association", University of Geneva, 12-14 September
- 2012 Member of the program committee, "PSX3: Experimentation as a Challenge for the Philosophy of Science", University of Colorado, Boulder, July 2012
- 2012 Member of the program committee, GAP.8 (8th International Congress of the Society for Analytic Philosophy), University of Konstanz, September 2012
- 2011 Organizer, workshop "Causation, Confirmation and Probability", University of Geneva, 1-2 December 2011
- 2011 Member of the program committee, "PSX2: Experimentation as a Challenge to the Philosophy of Science", University of Konstanz, 12-13 October 2011
- 2010 Member of the program committee, "PSX1: Experimentation as a Challenge to the Philosophy of Science", University of Pittsburgh

- 2009 Member of the program committee, EPSA 2009: Second Congress of the European Philosophy of Science Association, Amsterdam
- 2009 Member of the program committee, GAP.7: "Reflection and Projection: Challenges for Philosophy", 7th International Congress of the German Society für Analytic Philosophy, Bremen
- 2008 Co-organizer (with Hans-Bernhard Schmid and Daniel Sirtes), "Workshop on Collective Epistemology", University of Basel
- 2007 Member of the program committee, 13th International Congress of Logic, Methodology, and Philosophy of Science, Tsinghua University, Beijing
- 2007 Co-organizer (with Sebastian Knell), "Enhancing Human Longevity? Biological, Medical and Philosophical Perspectives", University of Basel
- 2006 Co-organizer (with Peter Schaber, Tatjana Tarkian, Helmut Heit und Thomas Reydon), "Reconstructing Science and Ethics", Leibniz University Hannover
- 2005 Co-organizer (with Martina Merz), "Science, Reason and Society: The Place of Philosophy in Studies of Science and Technology", University of Basel
- 2004 Member of the program committee, "Rethinking the Comparative Evaluation of Scientific Theories", University of Nancy 2 (France)
- 1999 Co-organizer (with Howard Sankey, Paul Hoyningen-Huene und Eric Oberheim), "Incommensurability and Related Matters", Leibniz University Hannover

Publications

A Monographs

Weber, Marcel (forthcoming) *Philosophy of Developmental Biology* (Elements in Philosophy of Biology, eds. Grant Ramsey and Michael Ruse). Cambridge: Cambridge University Press

Knell, Sebastian and Weber, Marcel: *Menschliches Leben* (Grundthemen Philosophie, ed. by D. Birnbacher, P. Stekeler-Weithofer und H. Tetens). Berlin: Walter de Gruyter 2009, 222 pp.

Review: *Zeitschrift für philosophische Forschung* 65 (2011), 3, 440-444

Weber, Marcel, *Philosophy of Experimental Biology* (Cambridge Studies in Biology and Philosophy, ed. M. Ruse). Cambridge: Cambridge University Press, hardback edition 2005, paperback edition 2010. 376 pp.

Reviews: *Notre Dame Philosophical Reviews* 2005-02-11; *Quarterly Review of Biology* 80: 343-344 (2005); *Philosophy in Review* 25: 411-413 (6, 2005); *Isis* 97: 198-199 (1, 2006); *Biology and Philosophy* 21 (3, 2006): 423-435; *Perspectives in Biology and Medicine* 50: 158-160 (2007); *Biological Theory* 1: 434-435 (4, 2006); *Essays in Philosophy* 7: 1-3 (1, 2006); *Rivista di Recensioni Filosofiche* 4: 51-67 (2007); *The Philosophical Review* 116: 139-141 (2007); *Erkenntnis* 71:431–436 (2009)

Weber, Marcel (1998), *Die Architektur der Synthese: Entstehung und Philosophie der modernen Evolutionstheorie* (Quellen und Studien zur Philosophie, ed. J. Mittelstraß, G. Patzig und W. Wieland). Berlin: Walter de Gruyter, 325 pp.

Review: *Philosophiegeschichte und logische Analyse* 5: 227-231 (2002)

B Edited books and collections

Anouk Barberousse, Richard Dawid and Marcel Weber (eds), *Topical Collection EPSA 2019*. Forthcoming in *The European Journal for Philosophy of Science*

Maria Carla Galavotti, Dennis Dieks, Wenceslao J. Gonzalez, Stephan Hartmann, Thomas

Uebel and Marcel Weber (2014), *New Directions in the Philosophy of Science*. Berlin: Springer.

Dennis Dieks, Wenceslao J. Gonzalez, Stephan Hartmann, Michael Stöltzner and Marcel Weber (2012), *Probabilities, Laws and Structures*. Berlin: Springer

Dennis Dieks, Wenceslao J. González, Stephan Hartmann, Thomas Uebel and Marcel Weber (2011), *Explanation, Prediction and Confirmation*. Berlin: Springer

Hans-Bernhard Schmid, Daniel Sirtes and Marcel Weber (2011), *Collective Epistemology* (Epistemic Studies, ed. by M. Esfeld, S. Hartmann and A. Newen). Frankfurt am Main: Ontos

Friedrich Stadler, Dennis Dieks, Wenceslao J. González, Stephan Hartmann, Thomas Uebel and Marcel Weber (2010), *The Present Situation in the Philosophy of Science*. Berlin: Springer

Knell, Sebastian and Marcel Weber (2009), *Länger leben? Philosophische und biowissenschaftliche Perspektiven*. Frankfurt (Main): Suhrkamp

Weber, Marcel and Paul Hoyningen-Huene (2001), *Ethische Probleme in den Biowissenschaften* (Philosophische Impulse, Band 1, Hrsg. F. Mühlhölzer und W. Spohn). Heidelberg: Synchron, 211 pp.

C Articles in peer-reviewed journals

Weber, Marcel (2017), How Objective Are Biological Functions? *Synthese* 194: 4741-4755

Weber, Marcel (2017), Which Kind of Causal Specificity Matters Biologically? *Philosophy of Science* 84: 574–585

Weber, Marcel (2016), On the Incompatibility of Dynamical Biological Mechanisms and Causal Graphs. *Philosophy of Science* 83: 959-971

Weber, Marcel (2014): Experimental Modeling in Biology. *In-vivo* Representation and Stand-ins as Modeling Strategies. *Philosophy of Science* 81: 756-769

Weber, Marcel (2009): The Crux of Crucial Experiments. Duhem's Problems and Inference to the Best Explanation. *The British Journal for the Philosophy of Science* 60: 19-49.

Weber, Marcel (2008): Causes without Mechanisms: Experimental Regularities, Physical Laws, and Neuroscientific Explanation. *Philosophy of Science* 75: 995-1007.

Weber, Marcel (2006), The "Central Dogma of Molecular Biology" as a Thesis of Causal Specificity. *History and Philosophy of the Life Sciences* 28: 565-580

Weber, Marcel (2005), Indeterminism in Neurobiology. *Philosophy of Science* 71: 663-674

Weber, Marcel (2005), Genes, Causation and Intentionality. *History and Philosophy of the Life Sciences* 27: 399-411

Weber, Marcel (2005), Holism, Coherence, and the Dispositional Concept of Functions. *Annals in the History and Philosophy of Biology* 10: 189-201

Weber, Marcel (2005), Über die Vergleichbarkeit metaphysischer Systeme: Der Fall Leibniz kontra Locke. *Zeitschrift für philosophische Forschung* 59: 202-222

Weber, Marcel (2002), Incommensurability and Theory Comparison in Experimental Biology. *Biology & Philosophy* 17: 155-169

Weber, Marcel (2002), Theory Testing in Experimental Biology: The Chemiosmotic Mechanism of ATP Synthesis. *Studies in History and Philosophy of Biological and Biomedical Sciences* 33: 29-52

Weber, Marcel (2001), Determinism, Realism, and Probability in Evolutionary Theory. *Philosophy of Science* 68: S213-S224

Weber, Marcel (1999), The Aim and Structure of Ecological Theory. *Philosophy of Science* 66: 71-93

Weber, Marcel (1999), Hans Drieschs Argumente für den Vitalismus. *Philosophia Naturalis* 36: 265-295

Weber, Marcel (1998), Representing Genes: Classical Mapping Techniques and the Growth of Genetic Knowledge. *Studies in History and Philosophy of Biological and Biomedical Sciences* 29: 295-315

Weber, Marcel (1996), Fitness Made Physical: The Supervenience of Biological Concepts Revisited. *Philosophy of Science* 63: 411-431

Weber, Marcel (1996), Evolutionary Plasticity in Prokaryotes: A Panglossian View. *Biology & Philosophy* 11: 67-88

Weber, Marcel and Bernhard Schmid (1995), Reductionism, Holism and Integrated Approaches in Biodiversity Research. *Interdisciplinary Science Reviews* 20: 49-60

Verner, Keith and Marcel Weber (1989), Protein Import into Mitochondria in a Homologous Yeast in vitro System. *Journal of Biological Chemistry* 264: 3877-79

D Contributions to edited books and related

Weber, Marcel (forthcoming), A Tale of Three Sciences. From Reduction to Inter-level Practices in Developmental Biology. In: Janella Baxter, Oliver Lean and William Bausman (eds.), *From Biological Practice to Scientific Metaphysics*. Minnesota Studies in the Philosophy of Science, Vol. XXII. Minneapolis: University of Minnesota Press.

Weber, Marcel (forthcoming), Causal Selection versus Causal Parity in Biology: Relevant Counterfactuals and Biologically Normal Interventions. In: C. Kenneth Waters and James Woodward (eds.), *Philosophical Perspectives on Causal Reasoning in Biology*. Minnesota Studies in the Philosophy of Science, Vol. XXI. Minneapolis: University of Minnesota Press.

Arber, Werner and Marcel Weber (2019), The Complementary Nature of Scientific Experiments and Thought Experiments. In: Marcelo Sánchez Sorondo (ed.), *Proceedings of the Plenary Session of the Pontifical Academy of Sciences, 12-14 November 2018*. Vatican City: Pontifical Academy of Sciences

Weber, Marcel (2018), Experiment in Biology (updated version) in: E.N. ZALTA (ed.), *The Stanford Encyclopedia of Philosophy*. Stanford: The Metaphysics Research Lab, Center for the Study of Language and Information, Stanford University
<http://plato.stanford.edu/entries/biology-experiment/>

Schlaepfer, Guillaume and Weber, Marcel (2018), Thought Experiments in Biology. In: Michael T. Stuart, Yftach Fehige and James R. Brown (eds.), *The Routledge Companion to Thought Experiments*. London: Routledge, pp. 243-256.

Weber, Marcel (2016), Wissenschaftlicher Pluralismus und die Bio-Gerontologie. In: André Blum, Nina Zschocke, Hans-Jörg Rheinberger und Vincent Barras (eds.), *Diversität. Geschichte und Aktualität eines Konzepts*. Würzburg: Königshausen & Neumann, pp. 107-124.

Weber, Marcel (2014), Qu'est-ce qu'une vache? In: Anne Meylan and Olivier Massin (eds.), *Aristote chez les Helvètes. Douze essais de métaphysique helvétique*. Montreuil : Ithaque.

Weber, M. (2014) "Reference, Truth, and Biological Kinds", in: Dutant, J., Fassio D. and Meylan A. (eds.) *Liber Amicorum Pascal Engel*, University of Geneva, pp. 422-448.
URL <http://www.unige.ch/lettres/philosophie/publications/engel/liberamicorum>

Bauer, S., Huber, L., Kaiser, M. I., Keuck, L., Krohs, U., Kronfeldner, M., McLaughlin, P., Nickelsen, K., Reydon, T., Roughley, N., Sachse, C., Scharck, M., Toepfer, G., Weber, M., Wild, M. (2013), Philosophie der Lebenswissenschaften: Entwicklungen und Tendenzen. *Information Philosophie*, Heft 4, Dezember 2013, pp. 14-27.

Weber, Marcel (2012), Wissenschaftsphilosophie, in: S. Maasen, M. Kaiser, M. Reinhart and B. Sutter (eds.), *Handbuch Wissenschaftssoziologie*. Wiesbaden: Springer VS, 229-240

Weber, Marcel (2012), Experiment in Biology, in: E.N. ZALTA (ed.), *The Stanford Encyclopedia of Philosophy*. Stanford: The Metaphysics Research Lab, Center for the Study of Language and Information, Stanford University
<http://plato.stanford.edu/entries/biology-experiment/>

- Weber, Marcel (2011), Behavioral Traits, the Intentional Stance, and Biological Functions: What Neuroscience Explains. In: K.S. Plaisance and T.A.C. Reydon (eds.), *Philosophy of Behavioral Biology*. Boston Studies in the Philosophy of Science 282. Berlin: Springer, 317-328
- Weber, Marcel (2011), Experimentation versus Theory Choice: A Social-Epistemological Approach. In: Hans-Bernhard Schmid, Daniel Sirtes und Marcel Weber (eds.), *Collective Epistemology*. Frankfurt am Main: Ontos, S. 195-216.
- Weber, Marcel (2010): Eintrag "Philosophie der Biologie" in: Hans-Jörg Sandkühler (ed.), *Enzyklopädie Philosophie*. Zweite, überarbeitete Version. Hamburg: Meiner
- Weber, Marcel (2010), Genetik und Moderne Synthese. In: Philipp Sarasin and Marianne Sommer (eds.), *Evolution: Ein interdisziplinäres Handbuch* Stuttgart: Metzler, p. 102-114.
- Weber, Marcel (2010), Life in a Physical World, in: Friedrich Stadler, Dennis Dieks, Wenceslao J. González, Stephan Hartmann, Thomas Uebel and Marcel Weber (eds.), *The Present Situation in the Philosophy of Science* (Philosophy of Science in a European Perspective, Vol. 1). Berlin: Springer, pp. 155-168.
- Weber, Marcel (2008), Is Science Cumulative? A Commentary on Bernard D'Espagnat. In: Léna Soler, Howard Sankey and Paul Hoyningen-Huene (eds.), *Rethinking Scientific Change* (Boston Studies in Philosophy of Science). Berlin: Springer, 151-154
- Weber, Marcel (2008): Rules, Reductionism, and Normativity: A Naturalistic Rejoinder. In: Sven Walter and Helen Bohse (eds.), *GAP.6: Selected Papers Contributed to the Sections of the Sixth International Congress of the German Society for Analytic Philosophy*. Paderborn: mentis, 294-307
- Weber, Marcel (2008): Experimentation. In: Sahotra Sarkar and Anya Plutynski (eds.), *A Companion to the Philosophy of Biology* (Series: Blackwell Companions to Philosophy). Oxford: Blackwell, 427-488
- Weber, Marcel (2007): Wissenschaftstheorie der Evaluation. In: Dagmar Simon and Hildegard Matthies (eds.), *Wissenschaft unter Beobachtung. Effekte und Defekte von Evaluationen*. Leviathan Sonderheft 24/2007. Wiesbaden: VS Verlag für Sozialwissenschaften, 25-34.
- Weber, Marcel (2007): Philosophie der Evolutionstheorie. In: Andreas Bartels and Manfred Stöckler (eds.), *Wissenschaftstheorie. Ein Studienbuch*. Paderborn: Mentis, 265-285
- Weber, Marcel (2007): Redesigning the Fruit Fly: The Molecularization of Drosophila. In: Angela N. H. Creager, Elizabeth Lunbeck, and M. Norton Wise (eds.), *Science without Laws: Model Systems, Cases, Exemplary Narratives*. Durham: Duke University Press, 23-45
- Weber, Marcel (2007): Evolutionäre Kontingenz und naturgesetzliche Notwendigkeit. In: Brigitte Falkenburg (ed.), *Natur – Technik – Kultur. Philosophie im interdisziplinären Dialog*. Paderborn: Mentis, 125-138
- Weber, Marcel (2006): Die Geschichte wissenschaftlicher Dinge als Epistemologie. In: David Gugerli, Michael Hagner, Michael Hampe, Barbara Orland, Philipp Sarasin und Jakob Tanner (eds.), *Nach Feierabend. Zürcher Jahrbuch für Wissensgeschichte* Band 2. Zürich: diaphanes, 181-190
- Weber, Marcel (2005), Darwinism as a Theory for Finite Beings. In: Vittorio Hösle and Christian Illies (eds.), *Darwinism and Philosophy*. Notre Dame: University of Notre Dame Press , 275-297
- Weber, Marcel (2005), Supervenienz und Physikalismus. In: Ulrich Krohs and Georg Toepfer (eds.), *Philosophie der Biologie: Eine Einführung*. Frankfurt am Main: Suhrkamp, 71-87
- Weber, Marcel (2005), Philosophie des biologischen Experiments. In: Ulrich Krohs and Georg Toepfer (eds.), *Philosophie der Biologie: Eine Einführung*. Frankfurt am Main: Suhrkamp, 359-378
- Weber, Marcel (2005), Theorie, Experiment, Konstruktion: Weltbilder der Biologie. In: Emil Brix and Gottfried Magerl (eds.), *Weltbilder in den Wissenschaften* (Wissenschaft, Bildung, Politik. Hg. von der Österreichischen Forschungsgemeinschaft). Wien: Böhlau, 15-34
- Weber, Marcel (2004), Walking on the Chromosome. Drosophila and the Molecularization of Development. In: Jean-Paul Gaudillière and Hans-Jörg Rheinberger (eds.), *From Molecular Genetics to Genomics. Mapping Cultures of Twentieth Century Genetics*. London: Routledge, 63-78

Weber, Marcel (2004), On the Epistemic Significance of Type-Type Identities. A Comment on Katarzyna Paprzycka. In: Donald Gillies (ed.), *Laws and Models in Science*. London: King's College Publications, 129-132

Weber, Marcel and Michael Esfeld (2003), Holism in the Sciences. In: Gertrude Hirsch Hadorn (ed.) *Unity of Knowledge in Transdisciplinary Research for Sustainability*. Encyclopedia of Life Support Systems, developed under the auspices of UNESCO. Oxford: EOLSS Publishers (www.eolss.net)

Weber, Marcel (2001), Under the Lamppost: Commentary on Schaffner. In: Peter Machamer, Rick Grush and Peter McLaughlin (eds.), *Theory and Method in the Neurosciences*. Pittsburgh-Konstanz Series in the Philosophy and History of Science. Pittsburgh: University of Pittsburgh Press, 231-249

Weber, Marcel (2001), Kommentar zu Alan Hollands »Eine Kritik von Informationsmetaphern in der Genetik«. In: Marcel Weber and Paul Hoyningen-Huene (eds.), *Ethische Probleme in den Biowissenschaften*. Heidelberg: Synchron, 106-112

Weber, Marcel (1995), Wissenschaftskommunikation und Umweltprobleme. In: Urs Fuhrer (ed.), *Ökologisches Handeln als sozialer Prozess*. Basel: Birkhäuser, 51-60

Weber, Marcel (1995), Empirisierung der Biologie. In: Wolfgang Polasek (ed.), *Möglichkeiten und Grenzen der empirischen Wissenschaften*. Liestal: Verlag des Kantons Basel-Land, 65-87

E Other Publications

Weber, Marcel (2021), Corona-Krise: Die Feinde der Wissenschaft sind die wahren Feinde der offenen Gesellschaft. *Neue Zürcher Zeitung*, 7. April 2021

Bonas, U., B. Friedrich, J. Fritsch, A. Müller, B. Schöne-Seifert, H. Steinicke, K. Tanner, J. Taupitz, J. Vogel, M. Weber, E.-L. Winnacker (2017), Ethische und rechtliche Beurteilung des *genome editing* in der Forschung an humanen Zellen / Ethical and Legal Assessment of Genome Editing in Research on Human Cells. Diskussionspapier Nr. 10 / Discussion paper No. 10. Halle (Saale): Deutsche Akademie der Naturforscher Leopoldina / Nationale Akademie der Wissenschaften

Weber, Marcel (2011), Platons Altraum: Zur Biologie und Philosophie der Lebensverlängerung. *Unimagazin: Zeitschrift der Leibniz Universität Hannover* 03/04 2011, S. 62-65

Weber, Marcel (2011), Ursache und Wirkung - am Beispiel der Gene. *Spektrum der Wissenschaft* June 2011: 60-65

Weber, Marcel (2007-2009), Wissenschaftliche Exzellenz, Teil I: *Uni Nova* 107: 28-29; Teil II: *Uni Nova* 108: 24-25; Teil III: *Uni Nova* 109: 24-25; Teil IV: *Uni Nova* 110: 28-29; Teil V: *Uni Nova* 111: 31-32

Weber, Marcel (2007), Intentionalismus in der Philosophie der Biologie. In: *Information Philosophie*, October-issue 2007, 38-45

Weber, Marcel (2005), Genom, Mechanismus und Moral: Philosophische Stolpersteine. Kommentar zu K. Fuchs-Kittowski, H.A. Rosenthal und A. Rosenthal: Die Entschlüsselung des Humangenoms – ambivalente Auswirkungen auf Gesellschaft und Wissenschaft. *Erwägen, Wissen, Ethik. Streitforum für die Erwägungskultur* 16: 214-216

Weber, Marcel (2002), Ist Korrektur von Erbanlagen eine Frage der Gerechtigkeit? *Basler Zeitung*, 6. Nov 2002

Hoyningen-Huene, Paul, Marcel Weber and Eric O. Oberheim (1999), Science for the 21st Century: A New Commitment. Background document for the UNESCO / ICSU *World Conference on Science*. Paris: International Council for Science (ICSU), 40 pp. First published online by *Nature*, <http://helix.nature.com/wcs/a14a.html>

Weber, Marcel (1999), How the Oxidative Phosphorylation Controversy Ended. Volume of Abstracts, 11th International Congress for Logic, Methodology and Philosophy of Science, Krakow, International Union of History and Philosophy of Science, 353

Hoyningen-Huene, Paul, Marcel Weber and Eric O. Oberheim (1998), Editorial: Towards a New Social Contract for Science. *Nature & Resources: The UNESCO Quarterly Journal on the Environment and Natural Resources Research* 34: 3

Hoyningen-Huene, Paul, Marcel Weber and Eric O. Oberheim (1998), Éditorial: Vers un nouveau contrat social du monde scientifique. *Nature & Resources: Revue trimestrielle de l'UNESCO sur l'environnement et la recherche sur les ressources naturelles* 34: 3

Hoyningen-Huene, Paul, Marcel Weber and Eric O. Oberheim (1998), Editorial: Hacia un nuevo contrato social del mundo científico. *La Naturaleza y sus Recursos: Revista trimestral de la UNESCO dedicada a la investigación sobre el medio ambiente y los recursos naturales* 34: 3

Weber, Marcel, Michel Blot and Werner Arber (1996), On the Origin of Genetic Diversity. *GAIA* 4: 191-198

Weber, Marcel, Christian Körner, Bernhard Schmid and Werner Arber (1996), Diversity of Life in a Changing World *GAIA* 4: 185-190

Oeschger, Hans, Otto Smrekar and Marcel Weber (1995), Klimaforschung in der Tiefe der Jahre: 'Expecting the Unexpected'. *GAIA* 4: 30-39

Weber, Marcel (1995), On the Microreduction of Fitness. Volume of Abstracts, *10th International Congress of Logic, Methodology and Philosophy of Science*, Florence, International Union of History and Philosophy of Science, 521

Diamond, Jared M., Michael Altmann, Otto Smrekar and Marcel Weber (1994), Homo sapiens sapiens, the Third Chimpanzee, on the Brink of Extinction? *GAIA* 3: 148-156

Weber, Marcel (1993), The "Anything Goes" Philosopher: No Rules is a Good Rule for a Scientist to Follow, Paul Feyerabend Tells Marcel Weber. *The Times Higher Education Supplement*, 10 December

F Book Reviews

Weber, Marcel (2008), Joachim Ritter, Karlfried Gründer und Gottfried Gabriel (Hrsg.), *Historisches Wörterbuch der Philosophie* (Basel: Schwabe 1971-2007). *Studia Philosophica* 67: 393-395

Weber, Marcel (2008), Critical notice: Alex Rosenberg, *Darwinian Reductionism* (Chicago: University of Chicago Press 2006). *Biology and Philosophy* 23: 143-152

Weber, Marcel (2007), Review of Hans-Jörg Rheinberger: *Epistemologie des Konkreten. Studien zur Geschichte der modernen Biologie* (Frankfurt am Main: Suhrkamp 2006). *Isis* 98: 665-666

Weber, Marcel (2006), Review of Ron Amundson: *The Changing Role of the Embryo in Evolutionary Thought: Structure and Synthesis* (Cambridge: Cambridge University Press 2005). *Philosophy of Science* 73: 469-471

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Weber, Marcel (2005), Review of Robert A. Wilson (2004), *Genes and the Agents of Life. The Individual in the Fragile Sciences: Biology* (Cambridge: Cambridge University Press). *Notre Dame Philosophical Reviews* 2005-12-17

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Talks

1. Coherent Causal Control. Symposium “Distinctions within Causation: Irreversibility, Coherence, Invariance and Machine-likeness”, PSA 2020, 27th Biennial Meeting of the Philosophy of Science Association, Baltimore, 19-22 November 2020, postponed to 2021 due to COVID-19
2. Coherent Causal Control in Biological Systems. EPSA 2021, 8th Biennial Meeting of the European Philosophy of Science Association, Turin, 15-18 September 2021
3. Towards a Direct Modal Account of Evolvability. Workshop “Modeling the Possible”, University of Vienna, 24-25 June 2021 (taken online due to COVID-19).
4. Commentary on Rachel Ankeny and Sabina Leonelli, *Model Organisms*. Virtual Book Launch, University of Adelaide, 24 November 2020
5. Instructive Causes, Embryonic Induction and Causal Specificity. Workshop “Causal Distinctions: Specificity and Beyond.” University of Cologne, 22-23 October 2020 (taken online due to COVID-19).
6. Infectious Disease Epidemiology and the Value-free Ideal of Science. Quodlibeta, Department of Philosophy, University of Geneva, 7 October 2020.
7. Complexity: The Case of Pattern Formation in Early Embryonic Development. “Dealing with Complexity in the Life Sciences”, 6th European Advanced School in the Philosophy of the Life Sciences, Konrad Lorenz Institute for Evolution and Cognition Research, Klosterneuburg, 7-11 September 2020. Replaced by a week of online mentoring sessions due to COVID-19.
8. Biodiversité. Table-ronde organisée par l’Ambassade de France en Suisse au Musée zoologique de l’Université de Zurich lors de la « Nuit de idées », 30 janvier 2020
9. Causality, Idealization and Understanding in Developmental Biology: The Case of Morphogens, Philosophy of Biology Research Group, Department of Philosophy, University of California, San Diego, 22 November 2019
10. Signaling and Causality in Embryonic Development, or: What Are Morphogens? Colloquium, Department of Logic and Philosophy of Science, University of California, Irvine, 25 October 2019
11. Biological Reduction Reconsidered. Colloquium Series, Fachbereich Philosophie, Universität Salzburg, 26 March 2019
12. From Theory Reduction and Reductive Explanation to Inter-level Scientific Practices: The Spemann-Mangold Organizer and Molecular Developmental Biology. GWP 2019, The Third International Conference of the German Society for Philosophy of Science, Cologne, 25-27 February 2019
13. The Complementary Nature of Scientific Experimentation and Thought Experiments (with Werner Arber), Plenary Session, The Pontifical Academy of Sciences, Vatican City, 12-14 November 2018
14. From Reduction to Retooling: The Case of Classical Experimental Embryology and Molecular Developmental Biology. 5th European Advanced School in the Philosophy of the Life Sciences, Konrad Lorenz Institute for Evolution and Cognition Research, Klosterneuburg, 10-14 September 2018
15. Generative Entrenchment. Public Forum “From Biological Practice to Scientific Metaphysics: William C. Wimsatt’s Pioneering Ideas”, National Taiwan University, Taipei, 25 July 2018
16. From Reduction to Retooling: The Case of Classical Experimental Embryology and Molecular Developmental Biology. Summer Institute “From Biological Practice to Scientific Metaphysics”, Taipei, 20-26 July 2018

17. Is Gene Centrism Defensible? Keynote lecture, PhD Retreat of the Department of Biomedical Science, University of Basel. Einsiedeln, 7-9 June 2018
18. Biologically Significant Kinds. Workshop "Philosophy, Knowledge, and the Sciences", Florence-Pisa Doctoral School in Philosophy, Pistoia, 4-5 June 2018
19. Synthetische Modelle, Simulationen und Experimente in der Biologie. Ludwik Fleck Kolloquium: „Experimentieren. Zur Praxis wissenschaftlichen Forschens Teil II“, Collegium Helveticum, Zürich, 23. März 2018
20. Qu'est-ce que la vie ? Les enjeux philosophiques. « Seuls dans l'univers ? », Les Grands Soirs, conférences scientifiques culture & rencontre, Collège de Saussure, Genève, 24 janvier 2018
21. Le concept du vivant et la biologie contemporaine. « Questions de recherche », Séminaire de la Faculté des lettres, Université de Genève, 30 novembre 2017
22. Synthetic Models, Analogue Simulation and Experiment. Bordeaux-Geneva Workshop in Philosophy of Biology, University of Geneva, 10-11 October 2017
23. Biologische Funktionen ohne Normativität. Kolloquium "Normen und Zwecke in der Natur?", XXIV. Kongress der Deutschen Gesellschaft für Philosophie (DGPhil), Humboldt-Universität zu Berlin, 24.-27. September 2017
24. Causal Specificity, Biological Possibility, and Non-parity About Genetic Causes. *EPSA 2017* (Biennial Meeting of the European Philosophy of Science Association), Exeter, 6-9 September 2017
25. Reference, Use, and Biological Kinds: The Case of the Gene. Summer Institute "Practices of Individuation and Classification in Science", Calgary, 18 June – 1 July 2017
26. Urteilskraft in den Naturwissenschaften. Philosophische Gesellschaft Basel, 28. März 2017
27. Le cerveau et le mécanisme. Neuroclub, Geneva Neurosciences Center, Faculté de médecine, Université de Genève, 15 décembre 2016
28. On the Metaphysics of Biological Functions. Public Lecture, Minnesota Center for Philosophy of Science, University of Minnesota, Minneapolis, 2 December 2016
29. Race as a Causal Variable. Conference "Race and Racialisation: International and Interdisciplinary Perspectives", Department of Political Science, University of Geneva, 28-29 October 2016
30. How Objective Are Biological Functions? 4th European Advanced Seminar in the Philosophy of the Life Sciences. Konrad Lorenz Institute for Evolution and Cognition Research, Klosterneuburg, Austria, 5-9 September 2016
31. Individuation Practices in Biology. Summer Institute "Reconceiving the Success of Science", Basel, 1-11 August 2016
32. Functional Integration. Workshop "Understanding Life. New Perspectives from Philosophy and Biology", University of Bern, 26-27 May 2016.
33. Les questions de/dans la littérature et les sciences. Tandem théorique, Département de langue et littératures allemandes, Université de Genève, 19 mai 2016
34. How Objective Are Biological Functions? Département de philosophie, Université de Fribourg, 4 mai 2016
35. What's Special About Genes? Causal Specificity, Information, and Genetic Causation. Immunology Unit, CNRS & University of Bordeaux, 27 April 2016
36. **Keynote lecture:** Causality in Dynamical Biological Mechanisms. *EPSA 2015* (Biennial Meeting of the European Philosophy of Science Association), University of Düsseldorf, 23-26 September 2015
37. Genes, Biological Counterfactuals, and Causal Parity. Workshop "Causality in Biology", University of Bristol, 2-3 September, 2015
38. **Keynote lecture:** How Objective Are Biological Functions?, 8th Munich-Sydney-Tilburg Conference in Philosophy of Science, "Objectivity in Science", University of Tilburg, 10-12 June 2015

39. What Is A Biological Individual? Colloquium, Department of Philosophy, University of Bern, 21. April 2015
40. Synthetische Organismen als wissenschaftliche Modelle. Öffentliche Tagung "Evolution in Menschenhand? Synthetische Biologie aus Labor und Atelier", Berlin-Brandenburgische Akademie der Wissenschaften, 13. März 2015
41. Qu'est-ce qu'une vache ? Cycle de conférences publiques "Aristote chez les Helvètes", Université de Genève, 3 mars 2015
42. On the Incompatibility of Dynamical Biological Mechanisms and Causal Graph Theory. PSA 2014 (Biennial Meeting of the Philosophy of Science Association), Chicago, 6-8 November 2014
43. Les expériences de pensée : une méthode commune à la science et à la philosophie ? Journée maîtres de collège, Genève, 28 octobre 2014
44. Y-a-t-il des limites à la recherche ? Café des sciences dans le cadre de la nuit des chercheurs - 60 ans du CERN, Genève, 25 septembre 2014
45. Individuals, Cells, and the Special Composition Question. Third European Advanced Seminar in the Philosophy of the Life Sciences. Konrad-Lorenz-Institute, Klosterneuburg, 1-5 September 2014
46. Wissenschaftskultur und Lebensqualität: Ein Gegensatz? Öffentliche Tagung "Braucht es eine neue Wissenschaftskultur?" Akademien der Wissenschaften Schweiz, Leopoldina und Österreichische Akademie der Wissenschaften. Universität Zürich, 7. Juli 2014
47. Models and Experiments in Synthetic Biology. Biology Club, University of Geneva, 4 June 2014
48. Forschungsfreiheit. Café philo, Gymnasium Oberwil, 3. Juni 2014
49. Les êtres vivants. Groupe genevois de philosophie, 19 mai 2014
50. Indeterminism and the Brain. Conference "Libre arbitre, déterminisme et responsabilité. Un colloque en l'honneur de Bernard Baertschi", 12 May 2014
51. On Some Limitations of Causal Modeling. Colloquium, Institute for Philosophy, University of Hannover, 6 May 2014
52. On Some Limitations of Causal Modeling. Biology Club, Department of Plant Science, Université de Fribourg, 29 April 2014
53. On Some Limitations of Causal Modeling. Colloquium, Department of Philosophy, Université de Neuchâtel, 25 March 1914
54. Facile, pas facile de ... perdre son temps. Café scientifique, Musée d'histoire des sciences, Genève, 24 février 2014
55. Scientific Pluralism: The Case of Biogerontology. Interdisciplinary Workshop "Diversity", University of Lausanne, 5-7 September 2013
56. Causal Selection versus Causal Parity: Relevant Counterfactuals and Biologically Normal Interventions. Meeting of the International Society for the History, Philosophy and Social Studies of Biology (ISHPSSB), Montpellier, 7-12 July 2013
57. **Keynote lecture:** Is Causal Inference All You Need in Experimental Biology? "Causality and Experimentation in the Sciences", 8th Conference in the International Conference, Series "Causality in the Sciences", Université Paris 1 Panthéon-Sorbonne, 1-3 July 2013
58. Functional Integration, International Exploratory Workshop "After Functionalism: Realization, Embodiment, and Biofunctions", Université de Lausanne, 1-3 July 2013
59. Commentary on Paul Ziche and Thomas Müller, "Fictions and Foundations: Hans Vaihinger, Moritz Pasch and the Fictional Foundations of Rigorous Science", Workshop "Kontrafaktische Gedankenexperimente zwischen Natur- und Geisteswissenschaften, ca. 1880-1930", University of Konstanz, 19-20 April 2013
60. Experimental Modeling in Biology, Séminaire général, Institut d'histoire et philosophie des sciences et des techniques, Paris, 8 April 2013

61. Kausalität in der Biologie. Ringvorlesung "Philosophie und Wissenschaft", Philosophisches Seminar, Universität Hamburg, 16 January 2013
62. Les êtres vivants. Colloque PHILEAS (Association des étudiants de philosophie de l'université de Genève), 6 December 2012
63. Experimental Modeling: Exemplification and Representation as Theorizing Strategies, PSA 2012 (Biennial Meeting of the Philosophy of Science Association), San Diego, 15-17 November 2012
64. Is It Scientific to Make Truth Claims? Wilton Park Conference "The Big Bang and the Interfaces of Knowledge: Towards a Common Language?", organized in collaboration with the European Center for Nuclear Research CERN, Nyon, 15-17 October 2012
65. The Structuralist Challenge and Biology. ESF-Workshop "Metaphysics of Science: Objects, Relations and Structures, Université de Lausanne, 12-13 octobre 2012
66. Experimental Modeling in Biology. European Advanced Seminar in Philosophy of the Life Sciences, Université de Genève, 11-14 septembre 2012
67. Biological Counterfactuals. Workshop "Causal Reasoning in Biology II", Minnesota Center for Philosophy of Science, 3-6 May 2012
68. Causal Inference and Inference to the Best Explanation, *episteme* workshop "Evidence and Explanation", Université de Genève, 25-26 avril 2012
69. Individual, Cell Lineage, and Functional Integration. Workshop "Objects, Kinds and Mechanisms in Biology", University of Leeds, 13 April 2012
70. Life and Mind: Two Related Concepts? Séminaire interdisciplinaire "Langage et Pensée", Archives Jean Piaget, Université de Genève, 13 mars 2012
71. Leben und Geist: Zwei verwandte Begriffe? Ringvorlesung "Grenzen des Geistigen", Universität Göttingen, 18 January 2012
72. What Is an Individual Organism? Rencontre Philosophique Romande, Conférence universitaire de Suisse occidentale CUSO, Lausanne, 19 December 2011
73. Why Biology Without Objects or Without Fundamentals Wouldn't Be Biology. EPSA11 (Third Biennial Meeting of the European Philosophy of Science Association, Athens, Greece, 5-8 October 2011
74. Genes and the Philosophy of Causation. Department of Ecology and Evolution, University of Lausanne, 21 September 2011
75. Minnesota Pluralism: The Case of Biogerontology. Workshop on Interdisciplinarity, Department of Science Studies, University of Aarhus, Denmark, 17-18 August 2011
76. Causation and Information in Biology, or: Biological Counterfactuals. Institut d'histoire et philosophie des sciences et des techniques, Université Paris 1 / CNRS / École Normale Supérieure, 8 April 2011
77. Experimentation, Theory Choice, and Social Choice. Workshop "Points of Contact between the Philosophy of Physics and Philosophy of Biology", London School of Economics, 13-15 December 2010
78. **Keynote lecture:** Experimentation, Theory Choice, and Social Choice. Workshop "Philosophy of Scientific Experimentation: A Challenge to the Philosophy of Science", University of Pittsburgh, 15-16 October 2010
79. **Keynote lecture:** "Is Information Talk in Biology About Causal Specificity?", Annual Meeting of the British Society of Philosophy of Science, Dublin, 8-9 July 2010
80. Probabilistic Causation and the Brain, Workshop on Multi-level Causation, Institut d'histoire et philosophie des sciences et des techniques, Université Paris 1 / CNRS / École Normale Supérieure, 25-26 March 2010
81. Experimentation versus Theory Choice: A Social-epistemological Approach, Visiting Speakers Series in Philosophy of Science, Department of Philosophy, University of Vienna, 11 March 2010

82. Biologischer und psychologischer Altruismus, Philosophische Gesellschaft Zürich, 25 November 2009
83. Biologischer und psychologischer Altruismus, Philosophische Gesellschaft Bremen, 17 November 2009
84. Reference, Truth, and Biological Kinds. Second Biennial Meeting of the European Philosophy of Science Association (Symposium *Realism and the Biological Sciences*, with C. Kenneth Waters, Kyle Stanford and John Dupré), Amsterdam, 21-24 October 2009
85. Epistemology of Experimentation, Invited lecture, American Philosophical Association Eastern Division Meeting, Philadelphia, 27-30 December 2008
86. The Place of the Life Sciences: Life in a Physical World, First conference of the European Science Foundation Research Networking Program "Philosophy of Science in a European Perspective", Vienna, 18-20 December 2008
87. Commentary, Symposium "Extrapolation and Public Policy", PSA 2008, The Twenty-first Biennial Meeting of the Philosophy of Science Association, Pittsburgh, 6-9 November 2008
88. Reference, Truth, and Natural Kinds, Ninth Meeting of eidos, The University of Geneva Centre in Metaphysics and Philosophy of Science, 22-23 October 2008
89. Behavioral Traits, Biological Functions, and the Intentional Stance, Conference *Biological Explanations of Behavior*, Leibniz Universität Hannover, 11.-15. Juni 2008
90. A New Look at Biological Functions, Workshop *Causation in the Biomedical Sciences II*, Section de philosophie, université de Lausanne et Institut de l'histoire de la médecine et de la santé, université de Genève, Montreux, 31. März – 2. April 2008
91. Leben und Geist: Intentionalismus in der Philosophie der Biologie, Philosophische Gesellschaft Bremen, 10. Januar 2008
92. Scientific Significance Scrutinized (zus. mit Daniel Sirtes), *1st Congress of the European Philosophy of Science Association*, Madrid, 11-15 November 2007
93. Reference, Truth, and Biological Kinds, Annual Lecture Series, Center for Philosophy of Science, University of Pittsburgh, 5. Oktober 2007
94. Causal Specificity, Information, and the 'Central Dogma of Molecular Biology', Workshop *Information in Physics and Biology*, Division of History and Philosophy of Science, Department of Philosophy, University of Leeds, 14 September 2007
95. Life, Death, and Biological Kinds, Keynote lecture, Conference *Teaching Ethics in the Biosciences*, Inter Disciplinary Ethics Applied, a National Centre for Excellence in Teaching and Learning (IDEA CETL), University of Leeds, 13 September 2007
96. Evidenz und Kausalität aus philosophischer Sicht, asim Jahressymposium *Evidenz und Kausalität*, Academy of Swiss Insurance Medicine, Basel, 5. September 2007
97. Causes without Mechanisms: The Hodgkin-Huxley Model Revisited, Meeting of the International Society for the History, Philosophy and Social Studies of Biology (ISHPSSB). Organizer of the Symposium *Carving Out Action Potentials: Electrophysiology and the Causal Structure of the Nervous System* (co-symposiasts: Bill Bechtel, Carl Craver, Daniel Sirtes, Don Goodman, Kenneth Schaffner), Exeter, UK, 25-29 July, 2007
98. Explanatory Strategies in Experimental Biology", Meeting of the International Society for the History, Philosophy and Social Studies of Biology (ISHPSSB). Roundtable *Mechanisms, Functions, Organization, and Emergence: New Perspectives on Reductionism*, Exeter, UK, 25-29 July, 2007
99. "Mechanism, Experimental Reasoning and Inference to the Best Explanation", International workshop *Generating Experimental Knowledge*, Universität Wuppertal, 14.-17. Juni 2007
100. "Biological Functions: A Systems Account", Institut d'histoire et de philosophie des sciences et des techniques, Université Paris 1 Panthéon-Sorbonne / CNRS / École normale supérieure, 26. April 2007
101. "The Crux of Crucial Experiments: Confirmation in Molecular Biology." Joint conference *Confirmation, Induction, and Science*, Centre for Philosophy of Natural and

Social Science, London School of Economics and Center for Philosophy of Science, University of Pittsburgh, London, March 8-10, 2007

102. "The Central Dogma as a Thesis of Causal Specificity." International conference *History of the Central Dogma of Molecular Biology and its Epistemological Status Today*, Institute for the History of Medicine and Department of Medical Genetics, University of Geneva, February 22-23, 2007
103. "The Coming of Age of the Mechanical Philosophy?" Keynote lecture, international conference *Idealization, Mechanism and Reduction: New Directions in the Philosophy of Proximal Biology*, University of Queensland, Brisbane, Australia, 16-17 December 2006
104. "Information, Regulation und Intentionalität als Kategorien zur Beschreibung des Lebendigen." Center for the History of Science, Swiss Federal Institute of Technology, Zurich, 14 December 2006
105. "On the Use of Physical Theory in Neurobiological Explanation." Symposium *Where Physics Meets Neuroscience* (co-symposiasts: Kenneth Schaffner, Carl Craver and Jim Bogen), *PSA 2006: 20th Biennial Meeting of the Philosophy of Science Association*, Vancouver, British Columbia, 2-5 November 2006
106. "Three Kinds of Conceptual Change in Science." Minnesota Center for Philosophy of Science, University of Minnesota, Minneapolis, 30 October 2006
107. "Rules, Relativism, and Normativity: A Naturalistic Rejoinder." *GAP.6: Sixth Congress of the German Society for Analytic Philosophy*, Free University Berlin, 11-14 September 2006
108. "Naturalistic Replies to Social Relativism" *Reconstructing Science and Ethics*, Symposium on the occasion of Paul Hoyningen-Huene's 60th birthday, University of Hanover, 13-15 July 2006
109. "On the Use of Physical Theory in Neurobiological Explanation." Sixth Congress of HOPOS, The International Society for the History of Philosophy of Science, Paris, 14-18 June 2006. Organiser of the symposium *Explanation in Neuroscience: Past and Present*, with Carl Craver, Tara Abraham and William Bechtel
110. "Wissenschaftstheorie der Evaluation." Conference *Qualitätssicherung von Wissenschaft im Wandel*, Wissenschaftszentrum Berlin für Sozialforschung (WZB) und Zentrum für Wissenschafts- und Evaluationsforschung, Berlin, 1-3 June 2006
111. "Three Kinds of Conceptual Change in Natural Science." Department of History and Philosophy of Science, Cambridge University, 27 April 2006
112. "What's Special About Genes? Some Philosophical Considerations." Conference *Embracing Life – Challenges and Questions in Patenting for Life Sciences*. Swiss Academy of Sciences, Gwatt, 3-4 November 2005
113. "Genes, Causation and Intentionality." Center for Philosophy of Biology, Duke University, Durham, North Carolina, 18 October 2005
114. "Natural Kinds and Conceptual Change: The Case of the Gene." Triangle Colloquium in Philosophy of Science, Duke University, Durham, North Carolina, 17 October 2005
115. "How Strong is the Case for Social Relativism in Science?" Colloquium, Department of Philosophy, Duke University, Durham, North Carolina, 14 October 2005.
116. "Genes, Causation and Intentionality." Colloquium, History of Science Program, Princeton University, Princeton, New Jersey, 7 October 2005