# P. KYLE STANFORD Curriculum Vitae

Department of Logic and Philosophy of Science University of California, Irvine Irvine, CA 92697-5100 Date of Birth: 4/22/70 Citizenship: USA (949)-824-6398 stanford@uci.edu

## **Education**

University of California at San Diego, 1991-1997 M.A. (Philosophy), December 1994 Ph. D. (Philosophy/Science Studies), June 1997 Doctoral Dissertation: "A Pragmatic Theory of Causation" Chair: Philip Kitcher

Northwestern University, Evanston, IL B.A. (Highest Distinction, Honors in Philosophy and Psychology), June 1991

# **Academic Positions**

Professor of Logic and Philosophy of Science, 2010-Present Chair, Department of Logic and Philosophy of Science, 2013-2018 Acting Chair, Department of Logic and Philosophy of Science, 2011-2012 Associate Professor of Logic and Philosophy of Science, 2004-2010 Assistant Professor of Logic and Philosophy of Science, 1998-2004 Assistant Professor of Philosophy, 1997-2000 University of California, Irvine

Senior Fellow Center for the Philosophy of Science University of Pittsburgh, 2012-2013

Visiting Professor of History and Philosophy of Science University of Pittsburgh, Jan. 2009-April 2009

# Selected Grants, Fellowships, Awards and Honors

Scholl Lectures (Purdue University), 2015
Distinguished Philosopher-in-Residence, NYU Abu Dhabi, Dec. 2014
Visiting Fellow, Australian National University, 2014
Senior Fellow, Pittsburgh Center for the Philosophy of Science, 2012-2013
Plenary Speaker, British Society for the Philosophy of Science Meeting (2007)

UCI Instructional Improvement Grant (with Jeff Barrett, 2005)
National Science Foundation Research Grant SES-0094001 (2001-2002)
Keynote Address: Stanford University UG Philosophy Conference (2002)
UCI Faculty Career Development Award (1999-2000)
Stanford University Donors' Lecture (1998)

## **Publications**

#### **Books:**

1. (2006). Exceeding Our Grasp: Science, History, and the Problem of Unconceived Alternatives. New York: Oxford University Press.

Reviewed in Science, Philosophy of Science, Mind, British Journal for the Philosophy of Science, British Journal for the History of Science, Isis, Biology and Philosophy, History and Philosophy of the Life Sciences, International Studies in the Philosophy of Science, Review of Metaphysics, Choice, Skeptical Inquirer, Metaphilosophy, et al.

#### **Articles:**

- 2. (1995). "For Pluralism and Against Realism About Species", *Philosophy of Science* 62: 70-91.
- 3. (1998). "Reference and Natural Kind Terms: The Real Essence of Locke's View", *Pacific Philosophical Quarterly 79*: 78-97.

Reprinted in Peter R. Anstey, ed., *John Locke: Critical Assessments of Leading Philosophers*, 4 vols. Abingdon: Routledge, 2006.

- 4. (2000, with Philip Kitcher). "Refining the Causal Theory of Reference for Natural Kind Terms", *Philosophical Studies* 97: 99-129.
- 5. (2000). "An Antirealist Explanation of the Success of Science", *Philosophy of Science* 67: 266-284.
- 6. (2001). "Refusing the Devil's Bargain: What Kind of Underdetermination Should We Take Seriously?", *Philosophy of Science 68 (Proceedings):* S1-S12.
- 7. (2001). "The Units of Selection and the Causal Structure of the World", *Erkenntnis 54:* 215-233.
- 8. (2002). "The Manifest Connection: Causation, Meaning and David Hume", *Journal of the History of Philosophy 40*: 339-360.

- 9. (2003). "No Refuge for Realism: Selective Confirmation and the History of Science", *Philosophy of Science* 70: 913-925.
- 10. (2003). "Pyrrhic Victories for Scientific Realism", *Journal of Philosophy 100*: 553-572.
- 11. (2005). "August Weismann's Theory of the Germ-Plasm and the Problem of Unconceived Alternatives", *History and Philosophy of the Life Sciences* 27: 163-199.
- 12. (2006). "Francis Galton's Stirp Theory of Inheritance and the Problem of Unconceived Alternatives", *Biology and Philosophy 21*: 523-536.
- 13. (2006). "Darwin's Pangenesis and the Problem of Unconceived Alternatives", *British Journal for the Philosophy of Science* 57: 121-144.
- 14. (2009). "Scientific Realism, the Atomic Theory, and the Catch-All Hypothesis: Can We Test Fundamental Theories Against All Serious Alternatives?", *British Journal For The Philosophy of Science* 60: 253-269.
- 15. (2009). "Grasping at Realist Straws: Author's Response" from Symposium Review of *Exceeding Our Grasp: Science, History, and the Problem of Unconceived Alternatives* (New York, Oxford University Press, 2006), *Metascience 18*: 355-390.
- 16. (2010), "Getting Real: The Hypothesis of Organic Fossil Origins", *Modern Schoolman* 87: 219-243.
- 17. (2011), "Damn the Consequences: Projective Evidence and the Heterogeneity of Scientific Confirmation", *Philosophy of Science* 78: 887-899.
- 18. (2012), "The Eyes Don't Have It: Fracturing the Scientific and Manifest Images", *Humana.Mente 21*: 19-44.
- 19. (2012, with Cailin O'Connor, Nathan Fulton, and Elliott Wagner), "Deus Ex Machina: A Cautionary Tale for Naturalists", *Analyse & Kritik 34:* 51-62.
- 20. (2015), "Catastrophism, Uniformitarianism, and a Realism Debate That Makes a Difference", *Philosophy of Science 82*: 867-878.
- 21. (2015), "'Atoms Exist' is Probably True, and Other Facts That Should Not Comfort Scientific Realists", *Journal of Philosophy 112*: 397-416.
- 22. (2016), with A.J. Thomas and B.W. Sarnecka, "No Child Left Alone: Moral Judgments About Parents Affect Estimates of Risk to Children", *Collabra: Psychology 2:* 10. Doi: <a href="http://doi.org/10.1525/collabra.33">http://doi.org/10.1525/collabra.33</a>.

- 23. (2017), "Bending Towards Justice: Essay Review of Michael Tomasello's *A Natural History of Human Morality*", *Philosophy of Science*, 84, 369-376.
- 24. (2018), "A Fond Farewell to 'Approximate Truth", *Spontaneous Generations* 9 (1); Doi: <a href="https://doi.org/10.4245/sponge.v9i1.28057">https://doi.org/10.4245/sponge.v9i1.28057</a>.
- 25. (2018), "The Difference Between Ice Cream and Nazis: Moral Externalization and the Evolution of Human Cooperation", *Behavioral and Brain Sciences* (Target Article), *41*, E95. Doi:10.1017/S0140525X17001911.
- 26. (2018), "Moral Externalization and Normativity: The Errors of our Ways", *Behavioral and Brain Sciences*, *41*, E119. Doi: <a href="https://doi.org/10.1017/S0140525X17002254">https://doi.org/10.1017/S0140525X17002254</a>.
- 27. (2019), "Unconceived Alternatives and Conservatism in Science: The Impact of Professionalization, Peer-Review, and Big Science", *Synthese*, *196*, 3915-3932. Doi: 10.1007/s11229-015-0856-4.
- 28. (forthcoming), "Rationalization May Improve Predictability Rather Than Accuracy", *Behavioral and Brain Sciences*.

# **Book Chapters:**

- 29. (2014), "Reading Nature: Realist, Instrumentalist, and Quietist Interpretations of Scientific Theories", in *Physical Theory: Method and Interpretation*, Larry Sklar, ed., Ch. 4. New York: Oxford University Press: 94-126.
- 30. (2016). "Instrumentalism: Global, Local, and Epistemic", in *The Oxford Handbook of the Philosophy of Science*, Paul Humphreys, ed., Ch. 15. Oxford: Oxford University Press, 318-336.
- 31. (2016). "Naturalism Without Scientism", in *The Blackwell Companion to Naturalism*, Kelly James Clark, ed., Ch. 7. New York: Wiley-Blackwell, 91-108.
- 32. (2017). "So Long and Thanks for all the Fish", in *Metaphysics and the Philosophy of Science*, Matthew Slater and Zanja Yudell, eds., Ch. 6, Oxford University Press.
- 33. (2018). "Unconceived Alternatives and the Strategy of Historical Ostension", in the *Routledge Handbook of Scientific Realism*, Juha Saatsi, ed., Ch. 17, Routledge.
- 34. (forthcoming 2021), "Realism, Instrumentalism, Particularism: A Middle Path Forward in the Scientific Realism Debate", in *Contemporary Scientific Realism:*

*The Challenge from the History of Science*, Tim Lyons and Peter Vickers, eds., Ch. 10, Oxford University Press.

# **Encyclopedia Articles:**

- 35. (2006). "Instrumentalism" in *The Philosophy of Science: An Encyclopedia*, Sahotra Sarkar and Jessica Pfeifer, eds. New York: Routledge: 400-405.
- 36. (2006, with Jeff Barrett). "Prediction" in *The Philosophy of Science: An Encyclopedia*, Sahotra Sarkar and Jessica Pfeifer, eds. New York: Routledge: 585-599.
- 37. (2009). "Underdetermination of Scientific Theories" in *The Stanford Encyclopedia of Philosophy*, Edward N. Zalta, ed., <a href="http://plato.stanford.edu/">http://plato.stanford.edu/</a>. (Revised 9/13)

## **Book Reviews:**

- 38. (1999). "Preaching to the Choir? Robert Klee and the Latest Face of Scientific Realism" (Essay Review of Klee's *Cutting Nature at its Seams: Introduction to the Philosophy of Science*), Studies in the History and Philosophy of Science 30: 367-375.
- 39. (2001). Review of Elliott Sober and David Sloan Wilson's *Unto Others: The Evolution and Psychology of Unselfish Behavior*, *Journal of Philosophy* 98: 43-47.
- 40. (2008). Review of Hanne Anderson, Peter Barker, and Xiang Chen, *The Cognitive Structure of Scientific Revolutions, British Journal of the History of Science* 41: 116-117.
- 41. (2010). "Protecting Rainforest Realism", Symposium Review (with Katherine Hawley, Paul Humphreys, James Ladyman and Donald Ross) of James Ladyman and Donald Ross, *Everything Must Go: Metaphysics Naturalized* (New York: Oxford University Press, 2007), *Metascience 19*: 161-185.
- 42. (2020), "Resisting Scientific Realism with *or Without* van Fraassen's Darwinian Explanation", *Metascience*, 29: 25-31.

#### **Edited Works:**

43. (2013). "Choosing the Future of Science: The Social Organization of Scientific Inquiry" (Michael Weisberg, Kyle Stanford, and Kevin Zollman, eds.), *Episteme* (Special Issue) *10*: 387-478.

# **Popular Writings:**

44. (2017), "We're Really Bad at Judging Risk to Kids, We're Really Good at Judging Their Parents", *Washington Post*.

# **Other Professional Activity**

#### **Professional Service**

Series Editor, Oxford Studies in the Philosophy of Science, Oxford University Press, 2019-Present
Member, Editorial Board, Philosophy of Science, 2019-Present
Associate Editor, Philosophy of Science, 2009-2019
Chair, Nominating Committee, Philosophy of Science Association, 2012-2014
Governing Board Member, Philosophy of Science Association, 2007-2011

## **Selected Presentations:**

"Fret-Sawyers and Stamp Collectors: Realism, Instrumentalism, and Particularism"

Durham, UK, 2019

"Stein on Realism, Instrumentalism, and Intellectually Nourishing Snacks" Quo Vadis Scientific Realism? conference; Durham, UK; 2017 Conference in Honor of Howard Stein, University of Chicago, 2017

"But What if we Can't Confirm Theories of Quantum Gravity?"

Probing the Space-time Fabric conference at SISSA; Trieste, Italy; 2017

"No Child Left Alone" (w/Ashley Thomas and Barbara Sarnecka)
UCI Faculty/Staff Research Presentation, 2017

"A Middle Path Forward in the Scientific Realism Debate"

University of Western Ontario, 2017

Columbia University, Pragmatism Conference, 2017

Pittsburgh Center's Fellows Conference, Lund, Sweden, 2016

The History of Science and Contemporary Scientific Realism Conference, IUPUI, 2016

Purdue University (Scholl Lectures), 2015

"The Difference Between Ice Cream and Nazis: Evolution and the Hard Problem of Moral Psychology"

Purdue University (Scholl Lectures), 2015 Chapman University, 2015 NYU Abu Dhabi, 2014 Philosophy of Biology at Dolphin Beach, Australia, 2014 ISHPSSB, 2013 University of Pennsylvania, 2013

Bloomsburg University, 2013

Duke University, 2012

Washington University in St. Louis, 2012

UClub Forum (UCI), 2012

UC San Diego, 2011

UCI Center for the Scientific Study of Morality, 2011

University of Washington, 2011

University of Western Ontario, 2011

Comments on "The Significance of Errors in the History of Science"

Science and Certainty Conference, UCSD, 2015

"Catastrophism, Uniformitarianism, and a Realism Debate That Makes a Difference"

University of Colorado, 2015

NYU Abu Dhabi, 2014

Philosophy of Science Association Meeting, 2014

Australian National University, 2014

Lingnan University, Hong Kong, (Conference: Science: The Real Thing?), 2014

Indiana University, 2014

Universidad Autónoma Metropolitana, Mexico City, 2014

"So Long and Thanks For All The Fish"

NYU Abu Dhabi, 2014

Universidad Autónoma Metropolitana, Mexico City, 2014

"Naturalism Without Scientism"

NYU Abu Dhabi, 2014

Universidad Autónoma Metropolitana, Mexico City, 2014

"'Atoms Exist' is Probably True and Other Facts That Should Not Comfort Scientific Realists"

Universidad Autónoma Metropolitana, Mexico City, 2014

"Further Thoughts on Unconceived Alternatives: Catastrophism,

Uniformitarianism, and a Realism Dispute Worth Having"

University of Durham, "Unconceived Alternatives and Epistemic

Humility" Conference, 2013

"Getting What We Pay For: History, Incentives, and the Closing of the Scientific Mind"

Cambridge University CSER, Risk and the Cuture of Science, 2017

Pittsburgh Center for the Philosophy of Science, 2013

British Society for the Philosophy of Science Meeting, 2013

Bloomsburg University, 2013

American Association for the Advancement of Science Meeting, 2013

Philosophy of Science Association Meeting, 2012

"Comments on "Experiment vs. Simulation' Session"

ISHPSSB, 2013

"Naturalism, Quietism, Evangelism"

Center for the Philosophy of Science, University of Pittsburgh, 2012

"Bush's Nightmare: Changing Incentives and the Closing of the Scientific Mind"

Washington University in St. Louis, 2012

University of Western Ontario, 2011

University of Pennsylvania, 2010

UC San Diego, Science Studies Program, 2010

Erwin Schrödinger Institute, University of Vienna, (Un)Conceived

Alternatives Symposium, 2009

"M' (A Word of Thanks)"

University of Toronto, 2011

"Damn the Consequences: Projective Evidence and the Heterogeneity of Scientific Confirmation"

Henle Conference, Saint Louis University, 2010

Philosophy of Science Association Meeting, 2010

University of Pennsylvania, 2010

"Beyond Good and Evil: Scientific Realism and the Varieties of Evidence" University of Konstanz 2010

"The Evolutionary Function of Moral Projection"

Pittsburgh Center for History and Philosophy of Science, 2009

"Getting Real: The Hypothesis of Organic Fossil Origins"

\*Universidad Autónoma Metropolitana, Mexico City, 2014

Cambridge University, 2009

European Philosophy of Science Association Meeting, 2009

Underdetermination Workshop, Pittsburgh Center for HPS, 2009

&HPS2 Conference, Notre Dame, 2009

Oberlin College, 2008

"Unconceived Alternatives and the Incentive Structure of Scientific Research"

European Molecular Biology Laboratory, Heidelberg, 2007

Published as part of EMBL Online Science Seminars:

<a href="http://www.embl-">http://www.embl-</a>

heidelberg.de/aboutus/science\_society/onlineseminars/index.html>

"Why, How, and When to be an Instrumentalist"

Plenary Session, British Society for the Philosophy of Science, 2007

"Instrumentalism for Historians and Philosophers"

Cambridge University, Department of History and Philosophy of Science,

2007 "How to be Instrumentalists (and Just a Little on Why We Should Be)"

University of Michigan, Research Center for Group Dynamics, 2007

"Formal and Empirical Approaches to the Problem of Underdetermination"

University of Wuppertal workshop: The Empirical and the Formal, 2007 "Introduction/Response to Critics"

Author Meets Critics Session on *Exceeding Our Grasp: Science, History, and the Problem of Unconceived Alternatives*, American Philosophical Association (Pacific Division), 2007

"Science, History, and the Problem of Unconceived Alternatives"

University of Toronto, 2007

University of Michigan, 2007

California Institute of Technology, 2006

"Drawing the Right Morals: Tracking Truth and Scientific Realism" American Philosophical Association (Pacific Division), 2006 Philosophy of Science Association, 2006

"Realism in the Biological Sciences"

Cal State Northridge, 2006

"Theories of Generation and the Problem of Unconceived Alternatives" Canadian Society for the History and Philosophy of Science, 2006 University of Texas at Arlington, 2006

"The Problem of Unconceived Alternatives: Darwin, Galton, Weismann"
British Society for the Philosophy of Science, 2005
Cambridge University, Department of History and Philosophy of Science,

2005

British Society for the History of Science, 2005

University of Missouri, 2005

University of California, Santa Cruz, 2005

University of California, Irvine, 2005

"Causation and Natural Selection: Genes, Organisms, and Pragmatic Virtues"
UCLA Interdisciplinary Conference in Philosophy and History of Science,
2004

"No Refuge for Realism: Selective Confirmation and the History of Science" Philosophy of Science Association, 2002

British Society for the Philosophy of Science, 2002 (presented in absentia by Anjan Chakravartty)

Canadian Society for the History and Philosophy of Science, 2002

"Do Our Best Scientific Theories Really Tell Us What The World Is Like? Selective Confirmation, Realism, and the Historical Challenge"

Keynote Address: Stanford University Undergraduate Philosophy Conference, 2002

"Defending the Pessimistic Induction"

Southern California Philosophy Conference, 2001

"Refusing the Devil's Bargain: What Kind of Underdetermination Should We Take Seriously?"

Philosophy of Science Association, 2000

Claremont Colleges Colloquium (Pomona College), 2000

British Society for the Philosophy of Science, 2000

"The Challenge of History: The Human Genome Project and the American Eugenics Movement"

UCI Academy of Lifelong Learning, 1999

"Medical Ethics and the Human Genome Project"

Heritage Point Foundation, 1999

Comments on Edwin McCann's "Locke, Relative Identity, and an Anti-Essentialist

Argument", California Early Modern Scholars Conference, 1999

Comments on Kevin Lattery's "Reasoning with the Rosetta Stones of

Biology", American Philosophical Association, Pacific Division Meeting, 1998

"The Pragmatic Theory of Causation"

Stanford University Donors' Lecture, 1998

University of California, Irvine, 1997

University of California, Santa Cruz, 1997

"Reference and Natural Kind Terms: The Real Essence of Locke's View"

University of California, Irvine, Conference on Early Modern Philosophy and Science, 1997

"The Manifest Connection: Causation, Meaning and David Hume"

Notre Dame University, 1997

University of Colorado, Boulder, 1996

University of California, San Diego, 1996

## **Program Committees:**

2013 Senior Fellow's Conference, "Choosing the Future of Scientific Inquiry"

2012 Sydney/Tilburg Conference, "The Progress of Science"

2010 Sydney/Tilburg Conference, "The Future of Philosophy of Science"

2009 Pittsburgh Center Underdetermination Workshop

2009 European Philosophy of Science Association Meeting

2008 Philosophy of Science Association Meeting

## **Referee Service:**

Oxford University Press

Philosophy of Science

British Journal for the Philosophy of Science

Synthese

Biology and Philosophy

Philosophy of Science Association

Studies in the History and Philosophy of Science

International Studies in the Philosophy of Science

History and Philosophy of the Life Sciences

Journal of Philosophical Logic

Australasian Journal of Philosophy

Archiv für Geschichter der Philosophie

#### **Doctoral Committee Chair or Co-Chair:**

Bennett Holman, Logic and Philosophy of Science, UC Irvine, currently tenure-track at Yonsei University, South Korea

Cailin O'Connor, Logic and Philosophy of Science, UC Irvine, currently tenured at UC Irvine

Jessica Gonzalez, Logic and Philosophy of Science, current student

## **Graduate Courses Taught:**

Introduction to Philosophy of Science for Graduate Students (multiple occasions)

Locke and Hume (AY 1997-1998)

Species Concepts and Natural Kinds (AY 1997-1998)

Challenges to Scientific Realism (AY 1998-1999)

Theories of Causation (AY 1999-2000)

Philosophy of Biology (AY 2000-2001)

The Historical Turn in the Philosophy of Science (AY 2000-2001)

Scientific Explanation (AY 2002-2003)

Scientific Explanation and Contemporary Genetics (AY 2003-2004)

The Nature of Evolutionary Theory (AY 2005-2006)

Genes and Genetic Causation (AY 2006-2007)

Evolution and Language (AY 2007-2008)

Evolution and Morality (AY 2008-2009)

Scientific Realism (AY 2008-2009; University of Pittsburgh)

Evolution and Cognition (AY 2009-2010)

Naturalizing Morality (AY 2010-2011)

Darwinian Populations, Levels of Selection, and the Major Transitions (AY 2011-2012)

Evolution, Emotion, and Morality (AY 2013-2014)

Scientific Realism (AY 2014-2015)

Evolution and Morality (AY 2015-2016)

Scientific Realism and Instrumentalism (AY 2016-2017)

Can Ethics Be Naturalized? (AY 2017-2018)

What is Thinking For? (AY 2018-2019)

Historical Sciences and the Scientific Realism Debate (AY 2019-2020).