SALK INSTITUTE
FOR BIOLOGICAL STUDIES

Systems Neurobiology Laboratories

To: Tanya Sharpee & Sam Pfaff
Appointments Committee Chair & Co-Chair

Dear Tanya, Sam and members of APCOM:

We, John Reynolds, Rusty Gage, and Terry Sejnowski, are writing in strong support of Dr. Patricia Churchland's reappointment as an Adjunct Professor at the Salk Institute. Dr. Churchland is currently Professor Emerita of Philosophy at the University of California, San Diego, and has held an adjunct appointment at the Salk Institute since 1989.

Dr. Churchland is a pioneering figure in the field of neurophilosophy, making groundbreaking contributions to our understanding of the interface between neuroscience and philosophy. Her work has been instrumental in bridging these disciplines and advancing our knowledge of the brain and mind.

Dr. Churchland's numerous accolades include the prestigious MacArthur Fellowship, the Rossi Prize for Neuroscience, and the Prose Prize for Science. She has authored several influential books, including "Neurophilosophy: Toward a Unified Science of the Mind-Brain." and "Braintrust: What Neuroscience Tells Us About Morality."

Her service to the academic community is equally impressive, having served as President of both the American Philosophical Association and the Society for Philosophy and Psychology. As evidenced by her attached CV and Salk Adjunct Service/Contributions Form, Dr. Churchland has identified multiple ways in which she can continue to contribute to the Salk Institute as an Adjunct faculty member. These include giving seminars, teaching in Salk-organized courses, promoting award opportunities for Salk faculty, and organizing Salk meetings and conferences. Her ongoing engagement and commitment to the Salk community make her an invaluable asset to our institution. We wholeheartedly recommend Dr. Patricia Churchland's reappointment as an Adjunct Professor at the Salk Institute.

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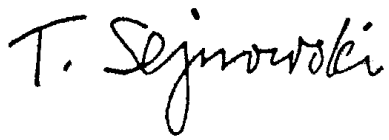
Dr. Churchland and Sejnowski have a new paper on “Transformers and Cortical Waves: Encoders for Pulling In Context Across Time” that is under review at *Trends in Neuroscience.*

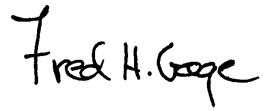
Thank you for considering this nomination.

Sincerely,

Professor John H. Reynolds
Fiona and Sanjay Jha Chair in Neuroscience
Professor, Systems Neurobiology Laboratory



Terrence Sejnowski
Francis Crick Chair
Director, Computational Neurobiology Laboratory



Fred H. Gage
Adler Professor, Laboratory of Genetics

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FRIDAY, APRIL 21 2023

PATRICIA SMITH CHURCHLAND: SHORT CV

Personal Information

Born: July 16, 1943
Citizenship: USA/Canada
Permanent Resident U.S.A
Married: Paul M. Churchland, Ph. D.
Telephone: 858-204-3807
Internet: pschurchland@ucsd.edu

Fields Of Specialization

Neurophilosophy
Neuroethics
Computational Neuroscience

Educational History

University of British Columbia, 1961-65, B.A.
University of Pittsburg, 1965-66, M.A.
Oxford University, 1966-69, B. Phil. (Oxon.)

Employment History

Assistant Professor, University of Manitoba, 1969-1977
Associate Professor, University of Manitoba, 1977-82
Visiting Member, Institute for Advanced Study, Princeton, 1982-83
Full Professor, University of Manitoba, 1983-84
Full Professor, University of California, San Diego, 1984 - 2010
Adjunct Professor, Salk Institute, 1989 -
UC President's Professor of Philosophy, 1999 –
Chair, Philosophy Department 2000 - 2007

Main Awards & Prizes

MacArthur Foundation Research Fellow, 1991-96
Elected, Academy of Humanism, 1993
Honorary Doctor of Letters, University of Victoria, 1996
Honorary Doctor of Laws, University of Alberta, 2007
Rossi Prize in Neuroscience 2008
Prose Prize for Science 2013
Revelle Fellow Medal, 2022

RECENT PUBLICATIONS

Books

Neurophilosophy: Toward a Unified Science of the Mind-Brain. (1986) Cambridge, Mass.: MIT Press.

The Computational Brain. (1992) P. S. Churchland and T.J. Sejnowski. Cambridge, Mass.: The MIT Press.

_____Italian Translantion, *Il Cervello Computazionale* (1995) il Mulino: Bologna

_____German Translation, *Grundlagen zur Neuroinformatik und Neurobiologie*. (1997). Vieweg.

Neurophilosophy and Alzheimer's Disease. (1992) Ed. by Y. Christen and P. S. Churchland. Berlin: Spinger-Verlag.

The Mind-Brain Continuum (1996). Ed. R. R. Llinas and P. S. Churchland. MIT Press.

On the Contrary : *Critical Essays 1987-1997*. (1998). Paul M. Churchland and Patricia S. Churchland. MIT Press

Brain-Wise: *Studies in Neurophilosophy*. (2002) Cambridge, MA: MIT Press.

_____Finnish translation *Neurofilosophia* (2004) Helsinki: Terra Cognita\

Braintrust: What Neuroscience Tells Us About Morality (2011) Princeton University Press.

Touching a Nerve: The Self As Brain (2013) W.W. Norton.

Conscience: The Origin of Moral Intuition (2019) New York, Norton.

Books About Us

The Churchlands and Their Critics, ed. R.N. McCauley, Blackwells, 1996.

On The Churchlands, W. Hirstein, Wadsworth, 2003.

Articles

2019
Deliver Us From Evil: How Biology, Not Religion, Made Humans Moral
Patricia S. Churchland *New Scientist* – September 25

***Opinion:* Why Mammalian Brains are Geared Toward Kindness**
Patricia S. Churchland *The Scientist* – October 1

2018
The Computational Brain
25th Anniversary Edition
***Revised Forward:* Patricia S. Churchland, T.J. Sejnowski.**

2017
Neurophilosophy
Patricia S. Churchland *How Biology Shapes Philosophy: New Foundations for Naturalism. Chapter 5, 113-148. ed. David Livingstone Smith. Cambridge University Press*

2016
Blending Computational and Experimental Neuroscience
Patricia S. Churchland, Terrence J. Sejnowski *Neuroscience* – Sept 9

2015
Brains, Genes and Primates
Patricia S. Churchland *Neuron* – May 6, Volume 86

2014
Putting Big Data to Good Use in Neuroscience
Terrence J. Sejnowski, Patricia S. Churchland, J. A. Movshon *Nature Neuroscience* – November 17, Volume 11, 1440-1
Agency and Control: The Subcortical Role in Good Decisions
Patricia S. Churchland Moral Psychology: Free Will and Responsibility Volume 4, Chapter 8, Walter Sinott-Armstrong, Cambridge, MA: MIT Press
Looking-Glass Wars, review of The Myth of Mirror Neurons, by G. Hickok
Patricia S. Churchland *Nature* – July 31, Volume 51, July
Evolved Morality: The Biology and Philosophy of Human Conscience
Frans B.M. de Waal, Patricia S. Churchland, Telmo Pievani, Stefano Parmigiani *Behavior* – 151, 137-141.

2009

Control: Conscious and Otherwise. With C. Suhler. *Trends in Cognitive Sciences*.

2008

The Impact of Neuroscience on Philosophy**.** *Neuron*, 60, Nov 6.
Inference to the best decision. In: *Oxford Handbook of Philosophy and Neuroscience*, ed J. Bickle. OUP.

Human dignity from a Neurophilosophical Perspective, in *Human Dignity and Bioethics: Essays Commissioned by the President's Council on Bioethics*, ed by A. Schulman. 99-121.

2007
Neurophilosophy: The Early years and New Directions. *Functional Neurology*. 22(4): 185-195.
Review of *The Stuff of Thought*, by S.Pinker. Nature.

2006
Moral decision-making and the brain. In: *Neuroethics: Defining the Issues in Theory, Practice and Policy*. Ed. J. Illes. Oxford University Press. 3-16.

Do we have free will? *The New Scientist*. 18 November 2006.

Can neurobiology teach us anything about consciousness? In: *Philosophy of Cognitive Science: Classical and Contemporary Readings*, ed by D. Chalmers. Oxford University Press.

2005
A neurophilosophical slant on consciousness research. *Progress in Brain Research.* Eds. V.A. Casagrande, R. W. Guillery, & S. M. Sherman and. pp. 285-294

Moral decision-making and the brain. In: *Neuroethics: Defining the Issues in Research, Practice, and Policy.* Ed by J. Illes. New York: Oxford University Press.pp. 3-16

Brain Wide Shut, *New Scientist*, 30 April 2005. pp. 46-49.

Brain-based values Review of *The Ethical Brain* by Michael Gazzaniga. *American Scientist*.

2004
How Do Neurons Know? *Daedalus* Spring 2004.

Cerebro y responsibilidad (translation of Decisions, Responsibility, and the Brain). Nuevos Aminos del Conocimiento 2004. Santander Fondacion. Pp. 96 – 116.

Intertheoretica Reduction: A Neuroscientist's Field Guide (translated into Polish: Interteoretska redukcija: podrocni vodnik za nervoznanstvenike) *Analiza* 8(3) 60-72.

2003

The neural mechanisms of moral cognition: A multiple-aspect approach to moral judgment and decision-making. With W. D. Casebeer. *Biology and Philosophy* 18:169-194.

Self-representation in nervous systems (reprint). In: *The Self: From Soul to Brain*. Ed. J. LeDoux, J. Debiec & H. Moss. *Annals of the New York Academy of Science*. 1001: 31-38.

Neural Worlds and Real worlds, with P. M. Churchland*, Nature Reviews/Neuroscience.* November 2002*.*

2002

Self-representation in nervous systems, *Science.* Vol. 296: 308-310.

Neural Worlds and Real Worlds, *Nature Reviews/Neuroscience*. 3:903-907.

Neuroscience: Reflections on the Neural Basis of Morality. In: *Neuroethics: Charting the Field*, Ed. J. Illes. Dana Press, November, 2002.

(Reprint) Can neurobiology teach us anything about consciousness? *Editura Academiei Romane* 26:133-154.

2001

Why Neuroscience Still Needs Pioneers" in Carving our Destiny: Scientific research Faces a New Millenium. Ed. Susan Fitzpatrick and John T. Beuer. National Academy of Sciences Publications (Joseph Henry Press). 117-122.

The View from Here: The Nonsymbolic Structure of Spatial Representations (I. Farber, W. Peterman, and P. S. Churchland) in The Foundations of Cognitive Science. Ed. by J. Branquinho. Oxford: Oxford University Press.

2000

Foreword to new edition of John von Neumann's book, The Computer and the Brain. Yale University Press. pp xi - xxii

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Salk Adjunct Service/Contributions Form

Name: Patricia Churchland **Appointment Start Date:**
Sponsors: John Reynolds, Rusty Gage & Terry Sejnowski

To be eligible for appointment and reappointment in the Adjunct series, appointees are expected to be engaged in **at least two** Institute-related activities outlined below. If you are being considered for your first Adjunct Professor appointment, provide information about your plans to engage in the Salk community and select any of the activities you would be interested in below. If you are being considered for reappointment, select your ongoing activities and give a brief summary of your engagement in each activity during the past appointment period. Also provide a summary of your plans to engage in the Salk activities during the next appointment period.

Salk Activities (list the course/seminar titles, committees, and student names if known)
** Please note research collaborations with a Salk Faculty sponsor(s) do not qualify as Institute-related activities expected for an Adjunct position*

☒ Giving Seminars, such as those hosted by Sponsors or by the Institute
☒Teaching in Salk-organized courses
☐ Serving on UCSD Student Review committees and/or Thesis Committees in Salk Labs
☐ Reviewing Postdoctoral and other Internal Grants
☐Participating in Salk's outreach and educational efforts to recruit underrepresented minority student applicants

☐Consulting on Salk scientific initiatives or multi-PI grants
☐Serving on Faculty Review Committees
☒Promoting award and nomination opportunities for Salk Faculty
☒ Organizing or participating on Salk Meetings or Conferences
☐ Other

Salk Service Summary & Plans: Describe your plans to engage in the activities marked above during the next appointment period (i.e.: Salk Course or Seminar Titles, names of Student or Faculty review committee, description of contributions to grants, etc. if unable to fit above). If you are being considered for reappointment, also describe your engagement in the Salk activities during the last appointment period. You may attach a supplemental letter with these activities as needed.

I have had the joy and delight of being an adjunct professor at the Salk Institute since 1989, and I feel a very strong affiliation with the Salk. I have been involved in the UCSD-Salk CARTA institution since its inception, and I have helped to organize many of its symposia at the Salk. I am an informal member of the Sejnowski lab, and often come by for tea and discussion.

I have been a co-teacher with Terry Sejnowski of several graduate courses (UCSD/Salk), including one this term (January-April 2024) on the Brain and AI.

Along with Tom Albright and Francis Shen (Harvard Law and Neuroscience) I am helping to plan and organize a one-day meeting on neuroscience and the law, to be held in September 2024 at the Salk, paid for by the American Law Association. This will be a small meeting of neuroscientists and legal scholars that aims to identify the main questions emerging in the field, and where progress might be made in addressing those questions. The longer term goal is to organize a larger and more public symposium in the near future.