

VOLUME 28

NUMBER 4

OCTOBER 2019

SPECIAL
ISSUE

CQH

Cambridge
Quarterly of
Healthcare
Ethics

*A Quarterly Journal Devoted to
Engaging a World Community of
Bioethicists*

Clinical Neuroethics

CAMBRIDGE
UNIVERSITY PRESS

*Cambridge**Quarterly of**Healthcare**Ethics*

*A Quarterly
Journal Devoted
to Engaging a
World Community
of Bioethicists*

EDITOR

Thomasine Kushner, *University of California, Berkeley*
kushnertk@gmail.com

ASSOCIATE EDITOR

James Giordano, *Georgetown University Medical Center*

EDITORIAL BOARD

Yves Agid, *Institut du Cerveau et de la Moelle Épinière, France*
 Jennifer Chandler, *University of Ottawa, Canada*
 Markus Christen, *University of Zurich, Switzerland*
 Joseph J. Fins, *Weill Medical College of Cornell University, New York*
 Paul J. Ford, *Department of Bioethics, Cleveland Clinic*
 Grant Gillett, *University of Otago Medical School, New Zealand*
 John Harris, *University of Manchester, England*
 Stephen Hauser, *University of California, San Francisco*
 Judy Illes, *The University of British Columbia, Canada*
 Philipp Kellmeyer, *University of Freiburg Medical Center, Germany*
 Catherine Madison, *California Pacific Medical Center, San Francisco*
 Christine Mitchell, *Harvard Medical School*
 Erik Parens, *The Hastings Center, Garrison, New York*
 John R. Shook, *University at Buffalo*
 Alan Yee, *California Pacific Medical Center*

The Cambridge Bioethics Education Working Groups: Connecting Bioethics Educators Around the World

The purpose of the Cambridge Bioethics Education Working Groups is to encourage people and institutions to work together on developing bioethics education in their countries. These focus groups invite others to share their information and develop mutual projects to further how bioethics is taught in universities, hospitals, and for the general public.
<https://www.cambridge.org/core/journals/cambridge-quarterly-of-healthcare-ethics/cambridge-bioethics-education-working-groups>

EDITORS

Thomasine Kushner, PhD, *University of California, Berkeley*
 Steve Heilig, MPH, *San Francisco Medical Society*

ASSOCIATE EDITORS

Matti Häyry, *Aalto University, Helsinki, Finland*
 Tuija Takala, *University of Helsinki, Finland*
 David C. Thomasma, PhD, Co-Editor, 1992–2002

EDITORIAL BOARD

Akira Akabayashi, *Kyoto University, Japan*
 William Andereck, *Medicine and Human Values, California Pacific Medical Center, San Francisco*
 Daniel Callahan, *The Hastings Center, Garrison, New York*
 Arthur Caplan, *Division of Medical Ethics, NYU Langone Medical Center, New York*
 Andrew Dobson, *Keele University, England*
 Denise Dudzinski, *Department of Bioethics and Humanities, University of Washington School of Medicine*
 Joseph J. Fins, *Division of Medical Ethics, Weill Medical College of Cornell University, New York*
 Leonard M. Fleck, *Center for Ethics and Humanities, Michigan State University*
 Paul J. Ford, *Department of Bioethics, Cleveland Clinic*
 James Giordano, *Georgetown University Medical Center*
 John Harris, *University of Manchester, England*
 Gerrit K. Kimmsma, *Vrije Universiteit Amsterdam*
 Eric M. Meslin, *Indiana University Center for Bioethics, Indianapolis*
 Christine Mitchell, *Center for Bioethics, Harvard Medical School*
 Jonathan D. Moreno, *Center for Bioethics, University of Pennsylvania School of Medicine, Philadelphia*
 Rosamond Rhodes, *Mount Sinai School of Medicine, New York*
 Pablo Rodriguez del Pozo, *Weill Medical College of Cornell University in Qatar*
 Doris Schroeder, *Centre for Professional Ethics, University of Central Lancashire, England*
 Robyn Shapiro, *Center for the Study of Bioethics, Medical College of Wisconsin*
 Pavel Tichtchenko, *Institute of Philosophy, Academy of Science, Moscow, Russia*
 Griffin Trotter, *Center for Health Care Ethics, Saint Louis University*
 Mark R. Wicclair, *University of Pittsburgh & West Virginia University*

Cambridge Quarterly of Healthcare Ethics

Volume 28, Number 4, October 2019

CONTENTS

Contributors	579
Guest Editorial: Mary Warnock—An Appreciation JOHN HARRIS	582
Reading The Minds of Those Who Never Lived. Enhanced Beings: The Social and Ethical Challenges Posed by Super Intelligent AI and Reasonably Intelligent Humans JOHN HARRIS	585
Commentary: Other Minds, Other Intelligences: The Problem of Attributing Agency to Machines SVEN NYHOLM	592
Commentary: On Understanding Novel Minds DAVID R. LAWRENCE	599
Disorders of Consciousness, Past, Present, and Future JOSEPH J. FINS	603
From Awareness to Prognosis: Ethical Implications of Uncovering Hidden Awareness in Behaviorally Nonresponsive Patients MACKENZIE GRAHAM, EUGENE WALLACE, COLIN DOHERTY, ALISON McCANN, AND LORINA NACI	616
Commentary: Further Considerations in Using Functional Neuroimaging in Patients with Disorders of Consciousness JAMES L. BERNAT	632
Aligning the Criterion and Tests for Brain Death JAMES L. BERNAT AND ANNE L. DALLE AVE	635
Commentary: Defining Death: Definitions, Criteria, and Tests ROBERT D. TRUOG	642
Commentary: False Positives in the Diagnosis of Brain Death MICHAEL NAIR-COLLINS AND FRANKLIN G. MILLER	648
Neuroprosthetic Speech: The Ethical Significance of Accuracy, Control and Pragmatics STEPHEN RAINY, HANNAH MASLEN, PIERRE MÉGEVAND, LUC H. ARNAL, ERIC FOURNERET, AND BLAISE YVERT	657
Commentary: Neuroprosthetic Speech: Pragmatics, Norms, and Self-Fashioning KAROLA KREITMAIR	671
Addiction and Voluntariness: Five “Challenges” to Address in Moving the Discussion Forward ERIC RACINE AND CLAUDIA BARNED	677

Contents continued

Contents continued

Moving Beyond ‘Therapy’ and ‘Enhancement’ in the Ethics of Gene Editing BRYAN CWIK	695
Are We Ready for a “Microbiome-Guided Behaviour” Approach? ANDREA LAVAZZA AND VITTORIO A. SIRONI	708

Departments and Columns

Responses and Dialogue

A Critical Analysis of Joseph Fins’ Mosaic Decisionmaking: A Response to “Mosaic Decisionmaking and Reemergent Agency after Severe Brain Injury” (CQ 27 (1)) ANDREW PETERSON	725
Mosaic Decisionmaking and Severe Brain Injury: Adding Another Piece to the Argument JOSEPH J. FINS	737

Pathologies: Voices of Illness

ELST: Twenty Years with a vHL-Related Tumor in My Inner Ear JANKO ANDRIJASEVIC	744
---	-----

Perspectives

Detention, Capacity, and Treatment in the Mentally Ill—Ethical and Legal Challenges H. PAUL CHIN	752
The Legacy: An Interview with Ryan Farnsworth GUILLERMO PALCHIK	759

EDITORIAL OFFICE: Editorial correspondence, including manuscript submission, should be addressed to Thomasine Kushner, PhD. To facilitate review, please submit manuscripts as electronic copy, preferably in MS Word, to kushnertk@gmail.com. Books for review should be sent to Greg Loeben, 2532 N. 4th Street, #442 Flagstaff, AZ 86004. Books for review on neuroethics should be sent to Thomasine Kushner, 1001 Bridgeway #A1, Sausalito, CA 94965.

SUBSCRIPTION INFORMATION: *Cambridge Quarterly of Healthcare Ethics* (ISSN 0963-1801) is published quarterly in January, April, July, and October by Cambridge University Press, One Liberty Plaza, Floor 20, New York, NY 10006/ Cambridge University Press, Journals Fulfillment Department, UPH, Shaftesbury Road, Cambridge CB2 8BS, UK. Annual subscription rates for volume 28 (2019) USA, Canada, and Mexico/Elsewhere: Institutional rates, print and online: \$670/£417; online only: \$532/£331; print only: \$665/£415. Individual rates, print only: \$139/£84. Single part: \$191/£119. Students and retirees: \$115/£72. American Society for Bioethics and Humanities members: \$96/£57. Prices include postage. Subscription offices: One Liberty Plaza, Floor 20, New York, NY 10006, USA; outside the USA, Canada, and Mexico: Cambridge University Press, Journals Fulfillment Department, UPH, Shaftesbury Road, Cambridge CB2 8BS, UK. Claims for missing issues should be made immediately after receipt of the next issue. *Cambridge Quarterly of Healthcare Ethics* and other Cambridge journals can be found at <http://journals.cambridge.org>.

Cambridge Quarterly of Healthcare Ethics is a partner journal of the American Society for Bioethics and Humanities.

Periodicals postage paid at New York, NY and additional mailing offices. POSTMASTER: Send address changes in the USA, Canada, and Mexico to *Cambridge Quarterly of Healthcare Ethics*, Cambridge University Press, One Liberty Plaza, Floor 20, New York, NY 10006, USA. Send address changes elsewhere to *Cambridge Quarterly of Healthcare Ethics*, Cambridge University Press, Journals Fulfillment Department, UPH, Shaftesbury Road, Cambridge CB2 8BS, UK.

© Cambridge University Press 2019. All rights reserved. No part of this publication may be reproduced, in any form or by any means, electronic, photocopying, or otherwise, without permission in writing from Cambridge University Press. Policies, request forms, and contacts are available at: <http://www.cambridge.org/rights/permissions/permission.htm>

Cambridge Quarterly of Healthcare Ethics is indexed in Index Medicus and in the ASSIA, ISI, MEDLINE, Philosopher's Index, and Proquest databases.

Permission to copy (for users in the USA) is available from Copyright Clearance Center, <http://www.copyright.com>, email: info@copyright.com.