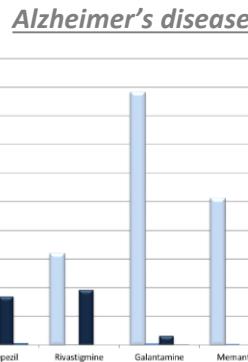
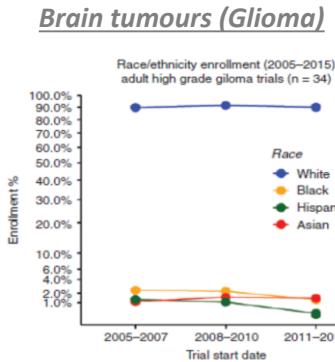


# Inclusive neuroinnovation: Setting the challenge for diversity and representation

John Noel Viana (john.viana@anu.edu.au)

Australian National Centre for the Public Awareness of Science, The Australian National University; Responsible Innovation Future Science Platform, Commonwealth Scientific and Industrial Research Organisation  
2021 International Neuroethics Society Annual Meeting; November 4 to 5, 2021

## II. Underrepresentation of ethnic minorities in neuroscience research



### Psychedelics

Country	# Studies	Psychedelic % White
Brazil	1	58.6%
Canada	1	0.0%
Mexico	1	90.0%
New Zealand	1	100.0%
Spain	1	100.0%
Switzerland	2	92.0%
UK	2	75.0%
USA	7	89.0%
Total/Weighted Avg/Avg <sup>†</sup>	16	81.6%

Michaels TI et al. Inclusion of people of color in psychedelic-assisted psychotherapy: a review of the literature. *BMC Psychiatry.* 2018;18(1):245.

## III. Understanding barriers and facilitators to ethnic minority representation

### MISTRUST

Society, scientific community, research institutions, healthcare system

### COMMUNICATION

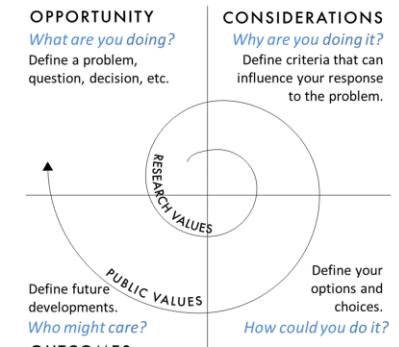
Low English proficiency and health literacy, Failure of researcher to communicate study details

### CULTURE

Stigma, culturally inappropriate measures, incompatible healthcare beliefs, alienation, informed consent

### MOBILITY

Restrictions due to culture or religion, Increased frailty or impaired functionality in elderly participants



Hughson JA et al. A review of approaches to improve participation of culturally and linguistically diverse populations in clinical trials. *Trials.* 2016;17:263.

Letter

Promoting diversity and inclusion in neuroscience and neuroethics

Olivia P. Matshabane

Department of Medicine, Faculty of Health Sciences, University of Cape Town, South Africa

NeuroView

NINDS Strategies for Enhancing the Diversity of Neuroscience Researchers

Michelle Jones-London<sup>a</sup>  
<sup>a</sup>Office of Programs to Enhance Neuroscience Workforce Diversity (OPEN), National Institute of Neurological Disorders and Stroke, NIH.  
Correspondence: jonesml@neuro.nichd.nih.gov  
Reproduced with permission from NeuroView

Reporting Grantee Demographics for Diversity, Equity, and Inclusion in Neuroscience

Saparna Choudhury<sup>a</sup> and Neil K. Aggarwal<sup>b</sup>  
<sup>a</sup>Division of Social and Transcultural Psychiatry, McGill University, Montreal, Quebec H3A 9G4, Canada, and <sup>b</sup>New York State Psychiatric Institute and Columbia University Medical Center, New York, New York 10032

Racial Injustice and Neuroethics: Time for Action

Francis X. Shen<sup>a,b,c</sup>

<sup>a</sup>Massachusetts General Hospital; <sup>b</sup>Harvard Medical School; <sup>c</sup>University of Minnesota

Diversity and inclusion in clinical neurosciences

Is It Time for Quotas to Achieve Racial and Ethnic Representation in Multiple Sclerosis Trials?

Farrah J. Mateen<sup>a</sup>

<sup>a</sup>Department of Neurology, Harvard Medical School, Massachusetts General Hospital, Boston, MA, United States

## I. Calls for diversity and inclusivity in neuroscience and neuroethics

When People of Color Are Left out of Research, Science and the Public Loses

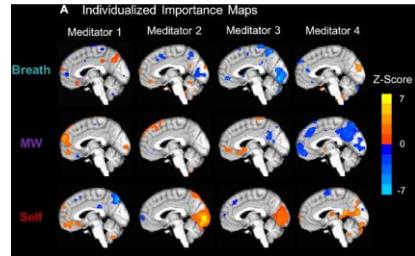
Keisha Shantel Ray  
University of Texas Health Science Center at Houston

Inclusive Research for Multiple Sclerosis

Inclusive research improves quality of scientific data, facilitates discovery of safety and efficacy, and assists in identifying population-specific differences.

Annette F. Okai, MD

## IV. An intersectional framework for increasing diversity in contemplative neuroscience



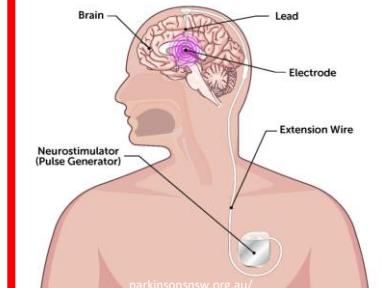
Weng HY et al. Toward a Compassionate Intersectional Neuroscience: Increasing Diversity and Equity in Contemplative Neuroscience. *Front Psychol.* 2020;11:573134.



Pre-Recruitment      Recruitment and data collection      Post-data analysis

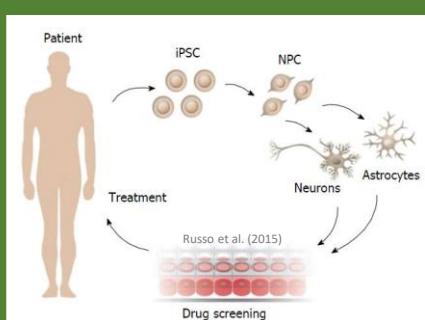
## V. Different considerations for different kinds of neuroscientific and neurotechnology research

### Deep brain stimulation



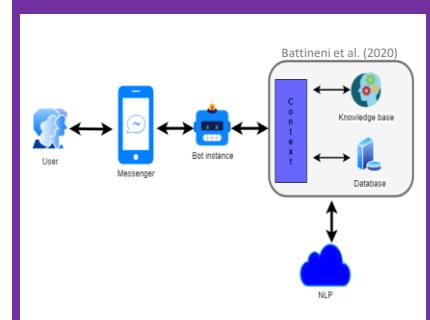
- ≥ Longitudinal engagement and multidisciplinary care needed
- ≥ Highly invasive and irreversible
- ≥ Potential effects beyond relief from motor/psychiatric symptoms

### Neuronal cell cultures



- ≥ Cultural differences on meanings of and acceptable uses for biospecimens
- ≥ Ability to transport and modify cells
- ≥ History of misuse of cell lines derived from ethnic minorities

### Mental health chatbots



- ≥ Access and availability to use mobile and computer technologies
- ≥ Importance of language and context
- ≥ Access to actual clinical care
- ≥ Sensitive behavioural information