Brain Research through Advancing Innovative Neurotechnologies® (BRAIN) Neuroethics Working Group (NEWG) Meeting January 26th, 2021

On January 26th, 2021, the National Institutes of Health (NIH) *Brain Research through Advancing Innovative Neurotechnologies*® (BRAIN) Initiative <u>Neuroethics Working Group (NEWG)</u> met virtually to discuss emerging ethics themes in the BRAIN portfolio and potential future workshop topics, and revisited neuroethics themes in the BRAIN 2.0 reports.

In opening remarks, John Ngai, PhD, Director of the NIH BRAIN Initiative, emphasized the importance of continuing to work towards equity, in general and in the neuroethics space. He also reminded participants of the joint session with the Multi-Council Working Group (MCWG) and NEWG, which took place the following day. Next, Saskia Hendriks, MD, PhD, Faculty in the NIH Bioethics Department and National Institute of Neurological Disorders and Stroke (NINDS) Neuroethics Consultant, presented key findings from an analysis on emerging neuroethical considerations in BRAIN grants awarded during fiscal year 2020. Dr. Hendriks summarized 12 themes identified by the analysis, which fell into two broad groups of potential ethical challenges: conducting research ethically; and the implications of research, tools, and technologies on individuals, groups, and society.

The NEWG valued these findings, recognizing that the themes were consistent with concurrent discussions of neuroethics priorities for BRAIN. Participants also considered increasing funding opportunity outreach efforts to neuroscientists interested in partnering with neuroethicists. Further, the group acknowledged the need to raise awareness about the value of integrating neuroethics into neuroscience research, potentially by hosting a workshop on identifying ways to facilitate this integration.

Henry (Hank) T. Greely, JD, Director of Law and Biosciences at Stanford University and co-chair of the NEWG, led a discussion on potential future NEWG workshop topics for the next phase of the NIH BRAIN Initiative. The group considered five possible topics based on themes identified in the BRAIN 2.0 neuroethics report: neural data and privacy, sharing, and use; ensuring inclusivity; clinical trials across the lifespan; non-human primate (NHP) research; and post-trial responsibilities. The NEWG discussed the importance of opportunities to connect neuroinformatics experts with neuroethicists, and considered a workshop on 'best practices' for data collection, sharing, and storage. They also discussed possible workshops focused on identifying ways to ensure inclusivity in neuroethics and neuroscience research, and in clinical trials across the lifespan. Further, participants took note of the relevance of animal research to neuroethics and BRAIN, especially in relation to global collaborations. Lastly, they discussed the possibility of hosting a workshop to further refine shared understanding of post-trial financial obligations to research participants (i.e., who pays for post-trial care?) and of post-trial care planning. NEWG members also raised additional topics, such as incorporating neuroethics into career development activities at all career stages and a 'big ideas' event that would enable innovative thinking about neuroethics themes by bringing together experts across disciplines. Importantly, a thread throughout these discussions was if/how each topic has unique aspects relevant to neuroethics and the BRAIN Initiative as a whole.

Finally, Christine Grady, RN, PhD, Chief of the NIH Department of Bioethics and NEWG co-chair, led a discussion about revisiting <u>BRAIN 2.0</u> themes. Dr. Grady reminded the group of the NEWG charges and summarized the themes from the <u>BRAIN 2.0 Neuroethics report</u>, which included neuroethics research, guidance on ethical issues, ethical frameworks, the integration of neuroethics and neuroscience, and

public engagement/communication. Meeting participants discussed what the NEWG can and should do in these areas of neuroethics. NEWG members expressed interest in engaging the broader research community and the public in neuroethics. Overall, the group noted that the NEWG is well positioned to address this by promoting research partnerships and by raising awareness about the field. The NEWG mentioned the possibility of creating educational resources to help neuroscientists and the public learn about ethics (e.g., neuroethics toolkits).

The meeting concluded with roundtable updates from NEWG members. They noted that Walter Koroshetz, MD, Director of NINDS, recently received the Steven E. Hyman Award for Distinguished Service to the Field of Neuroethics, which is sponsored by the International Neuroethics Society. The next NEWG meeting will be held on August 19, 2021 and a <u>videocast</u> will be available for live viewing and later archived.