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Nota di contenuto	Front Matter Summary 1. Introduction 2. The Science of Human Neural Organoids, Transplants, and Chimeras 3. Ethical Concerns 4. Oversight and Governance 5. Public Engagement 6. Findings of the Committee References Appendix A: Biographies of Committee and Staff Members Appendix B: Committee Meeting Agendas.
Sommario/riassunto	Each year, tens of millions of individuals in the U.S. suffer from neurological and psychiatric disorders including neurodegenerative diseases such as Alzheimer's Disease and Parkinson's Disease, and psychiatric disorders such as autism spectrum disorder, depression and schizophrenia. Treatments for these diseases are often completely lacking or only partially effective, due in large part to the difficulty of conducting brain research and the complexity of the brain itself. Researchers in recent years have developed new models to better represent and study the human brain. The three models considered in this report, all of which generate and use pluripotent stem cells from healthy individuals and patients, are human neural organoids, human neural transplants, and human-animal neural chimeras. The Emerging Field of Human Neural Organoids, Transplants, and Chimeras: Science, Ethics, and Governance reviews the status of research, considers its

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benefits and risks, discusses associated ethical issues, and considers governance mechanisms for this type of research.