

ELSI VARIABLES	Genetic Hunting and Gene Testing	Functional Neuroimaging	Molecular Imaging	Nano Neurotechnology
Risk of discrimination, stigma, coercion	Yes	Not at present, but growing concern exists for the evolution of the technology and expanding use	Unknown	Highly significant
Privacy	Yes	Yes	Yes	Yes
Distributive justice	Yes	Yes, once the technology moves into mainstream clinical medicine	Yes, once the technology moves into mainstream clinical medicine	Yes, once the technology moves into mainstream clinical medicine
Diagnostic uses	Yes	Emerging	Highly significant	Yes
Prediction	Yes	Emerging	Yes	Yes
Commercial use	Yes	Emerging; some limited availability already exists in the direct-to-consumer marketplace	Yes	Yes
Results subject to variability in test used	Potentially but not considered a significant risk	Highly significant	Yes	Likely
Results subject to physiologic and day-to-day variations	No	Highly significant	Yes	Likely
Results subject to variability in disposition of the interpreter	No	Highly significant	Unknown/unlikely	Unknown/unlikely
Biologization and manipulation of personal thought	Possibly in mental illness and neurodegenerative disease	Yes	Yes	Highly significant
Secondary uses of data	Yes	Yes	Yes	Yes

Table 1: Lessons from ethical, legal and social issues (ELSI) research in genetics for functional neuroimaging, molecular imaging and nano neurotechnology.