The White House Neuroscience Initiative

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Purpose and Scope:

To coordinate activities in neuroscience research across the Federal government with a focus on the fundamental understanding of learning, brain development, and plasticity, and applications to brain health and recovery.

The IWGN will enhance Federal efforts related to:

• improving our understanding of a variety of neurological conditions and injuries
• improving our understanding of learning and cognition and applying that to education and other areas
• developing appropriate resources, tools, techniques, and interventions to assist in research, treatment, and recovery
Key Research Areas

• Brain health and injury: including neurodegenerative diseases and disorders, traumatic brain injury (TBI), concussion, chronic traumatic encephalopathy (CTE), mental health, and addiction

• Recovery, rehabilitation, and remediation related to stroke, paralysis, amputation, and other injuries

• Neuroengineering; nano-neuro, including nanoprobes, neural implants and other devices; new technologies: e.g. optogenetics

• Neurodevelopment and plasticity

• Animal-environment interactions, e.g. effects of the exposome, stress, etc.

• Learning, memory, cognition and applications to education

• Advances in tools, technology, computational modeling, and shared resources for basic research and applications to improve well being