

YOUR LETTERHEAD

DATE

Philip H. Schwartz, PhD
Director, National Human Neural Stem Cell Resource
Children's Hospital of Orange County
455 South Main Street
Orange, California 92868-3874

Dear Dr. Schwartz:

I am happy to collaborate with you in developing the use of human neural stem cells, derived from post-mortem tissue, as a tool to examine basic neurophysiologic mechanisms in health and disease. With this letter, I am formally requesting cells from the National Human Neural Stem Cell Resource in order to study their electrophysiological properties.

Using specific culture conditions designed to foster differentiation of these cells into neurons, neural cell cultures will be produced by your laboratory and electrophysiological analysis of the stem cell cultures will be performed in my laboratory. These analyses will seek to establish the basic electrophysiological characteristics of stem cell derived neuronal populations: resting membrane potential, action potential and firing phenotypes, and the properties of voltage- and ligand-gated channels. Comparison of electrophysiological properties of neurons derived from stem cells obtained from control and neurological disease patients will be the first step in identification of disease specific cellular defects. Manipulation of growth conditions will then be employed to determine nutrients, drugs, and/or treatment strategies that can ameliorate or compensate for observed electrophysiological defects.

I look forward to working with you on this important research.

Sincerely,

Investigator
Title
Affiliation