Rethinking Huntington's: Disease may have origins in the womb

From the first days of the tiny lab-grown organs' development, primitive "progenitor cells" romped out of their birthplaces in the deep interior and quickly turned into neurons and glia, specialized cells that do the brain's heavy lifting.

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In healthy developing human brains, progenitor cells spend a good chunk of prenatal existence simply reproducing, vastly increasing their numbers and postponing becoming other brain cells. The impatient progenitor cells, however, were in cerebral organoids — minuscule 3-D versions of the brain — created from the cells of people with Huntington's disease in hopes of mimicking the patients' actual brain development decades earlier.

It was new evidence that, in their understanding of this devastating genetic illness, scientists know only half the story: In addition to being a neurodegenerative disease, it is also neurodevelopmental, starting in the womb. These recent findings and other research are spurring a radical rethinking of Huntington's, with implications for the age when any potential cure is likely to be most effective.

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If so, then if scientists discover a way to repair the mutant gene or remove the aberrant molecules it makes, "the earlier you intervene the better it should be."

Read full, original post: Research using brains-in-a-dish forces a radical rethinking of Huntington's disease