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the prospect for healing, and it is not...

SPEAKER KRISTENSEN: Time.

SENATOR LANDIS: ...about how we would end abortion or stop abortion in this state.

SPEAKER KRISTENSEN: Time. Senator Chambers.

SENATOR CHAMBERS: Mr. President, members of the Legislature, I've made a couple of notes on things that various senators have said. There are three, there are several types of cells in the brain and the nervous system, and the three that are implicated in these neurodegenerative disorders are the microglia, which are the immune cells, the astrocytes, which support these neurons, and the neurons themselves. The cells that are needed are the neurons. As Senator Landis and others have pointed out, even those who say that there are alternative means of obtaining tissue for further research, the underlying research was done with fetal cells from elective abortions. These cells are used even as the foundational study, in the foundational studies for cell differentiation studies, because the fetal cells will continue to grow; they don't last long, especially these neurons. Adults neurons don't continue to grow. Despite what Senator Hilgert said is being found in some types of research that some of these adult neurons can be maintained in a culture for a certain period of time, they are unusable for the research because some of them demonstrate immune reactions, some kill other cells. If immune cells in the brain are attacked, for example, by HIV, those immune cells begin to produce toxins that kill the neurons. So the diseases are diseases of adult brains, but adult brains cannot be used for the research because as brains age they carry the problems that go along with aging. These microglia and the astrocytes cannot even be obtained from adult brains and be used. There is technology moving in that direction, but it is not producing what is needed. The neurons that come from fetal tissue must be obtained from fresh tissue; they don't last long. They can be cultured, they can be reproduced or made to grow, and those cells are needed for the research. There are no animal models for Alzheimer's, there are no types of research which would be valuable in the curing of these neurodegenerative disorders in adults which can be found