Congress of the United States
House of Representatives
Washington, DC 20515

Why Do We Need More Stem Cell Lines?

PART II IN A SERIES ON THE PROMISE OF STEM CELL RESEARCH

ADULT STEM CELL LINES HAVE LIMITED POTENTIAL

December 22, 2004

Dear Colleague,

Embryonic, adult, and cord stem cells all have unique features that make them desirable to scientific inquiry and potentially able to treat or cure millions of Americans currently afflicted by diseases. That is why federally funded research should be aggressively pursued on all three types of stem cells.

Embryonic stem cells, which were discovered in 1998, have shown a unique ability to evolve into any cell type and to reproduce themselves indefinitely. Scientists hope that this ability will allow them to treat a wide range of diseases from diabetes and heart disease to Parkinson's, cancer, and spinal cord injury.

Adult stem cells, in contrast, are already pre-programmed and therefore cannot be induced to develop into any cell type. In addition, adult stem cells, which may not exist for some tissues, are difficult to identify, isolate, purify and grow. Their use for broad therapy is uncertain.

Prominent scientists and Nobel Laureates tell us that there is still much about stem cell research that we do not know. We cannot yet predict what types of diseases stem cell research will discover cures and treatments for. To make the most rapid progress, it is necessary to allow scientists to study all kinds of stem cells to resolve these questions.

Embryonic stem cells possess unique capabilities that simply cannot be ignored. We have only just begun to explore the promise and potential of stem cells. The current federal stem cell research policy is an obstacle to a full understanding of stem cells because it limits funding to an arbitrary number of lines. It must be changed so that the scientists can access the most advanced lines possible.

If you have any questions, please contact: Elizabeth Wenk in Rep. Castle's office (5-4165) or Meghan Taira in Rep. DeGette's office (5-4431).

Sincerely,

Diana DeGette

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