

Experts discuss stem cells

Panel advocates funding for embryonic stem cell research

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Stem cell research may play an increased role in New Jersey' future, and the University made that very well known in a student-organized forum on stem cells Thursday night.

"Human Cells, Humane Decisions" featured a panel of six specialists in the field of stem cell research, including three scientists, a lawyer, a congressman and a writer for The New York Times.

"New Jersey is the only state in the country that is using public funding for embryonic stem cell research," said panelist and congressman Rush Holt (D-NJ).

After a brief presentation from University neuroscience professor Wise Young explaining some basics of stem cells, the panel opened up the floor to student questions.

According to the forum's pamphlet, stem cells have the ability to rebuild new body tissues.

Two types of stem cells that were discussed included: adult stem cells, whose main role in the body is to maintain and repair tissue, and embryonic stem cells - which are four-to-five-day-old embryos called a blastocysts.

The major potential of stem cells lies in their ability to regenerate tissue and potential to help treat serious illnesses such as Parkinson's disease, Alzheimer's disease, in addition to spinal cord injuries, burns, stroke effects, heart disease, diabetes and arthritis, according to the forum pamphlet

"Around the world [stem cell] research is going on, and people are using the best self sources they can to produce treatment," said panelist Mark Noble, a professor of biomedical genetics at the University of Rochester. "The cells we get from developing organisms have the ability to develop tissue."

New Jersey will dedicate significant financial resources towards stem cell research.

"In the governor's tight budget, he is preserving [stem cell] research ... because he realizes this is necessary for economic growth and job growth," Holt said.

\$150 million will be spent to put a new stem cell research facility in New Brunswick, Young said.

"The funding for stem cell research facilities will come from cigarette tax funds, and I can't imagine a better source," Young said. "This is a place where stem cell research will make a difference and impact the world."

However, the rest of the country is not as willing to follow suit.

In the United States, funds for research and development of stem cells falls behind that given by other countries, said panelist John Gearhart, the director of the developmental genetics division of the Department of Gynecology and Obstetrics at the Johns Hopkins School of Medicine.

"Singapore alone has spent more on stem cell research than all of the United States," said Young.

The reason for this lies in the structure of the U.S. government, said Holt.

He said Americans face a problem in this country where legislation compensates for ignorance, because we send the message: science is for scientists. Therefore, 80 percent of the population believes science is not for them to understand, and legislators must represent that 80 percent. The consequence is bad legislation, according to Holt.

The controversy over stem cells is based on more than funding.

"The argument people like to use is that we were all embryos once, what are the moral choices, and where does life begin?" said panelist Bernard Siegel, the executive director of the Genetics Policy Institute.

"People state their positions in the strongest possible terms," said Gina Kolata, science and medicine reporter for The New York Times. "And yet, if I sit there and I listen, people are torn, and they know it is a difficult decision."

Kolata said the argument is after you start a fertilized egg, is there one point where the cell turns into something you can't touch? Those who believe the answer is no, she said, argue that once the process begins, it should not be touched.

Young referred the audience to a statement a friend of his once said, "If you are a fireman running into a burning lab, and you see a freezer full of blastocysts and an unconscious woman on the floor, which would you save? And would you be fired if you took the freezer?"

The panelists said the forum was a huge success.

"[The Student Society for Stem Cell Research] has 15 chapters around the country, and

this is the most successful event," said Siegel. "I'm honored. I've spoken at dozens of events, and this was the most lively. I thought the [student body] was great, had very interesting questions and showed a great deal of interest."

Students felt the forum succeeded, as well.

"It is every student's dream to meet with any one of [these panelists], and having all six of them here was amazing," said Ajar Kochar, president of SSSCR.

However, some agreed the one thing that the forum lacked was opposition.

"It was all pro-embryonic stem cell," said Steve Brooks, a class of 1985 alumni. "It was very informative of the pro-embryonic stem cell position, but I would like to see a balanced discussion, given the thoroughness of the panel presented."

Overall, the panelists agreed the questions and energy of the students was impressive and educational for everyone in attendance.

"It's a complex mixture of science, ethics, law and humanity," said Dean Kenneth Breslauer from the Division of Life Sciences. "I have faith we will have research prevail for the betterment of human health."