Can human genes be patented? That was the question posed by Alan J. Snyder, vice president and associate provost for research and graduate studies at Lehigh, and Lee Kaplan, scientific director of cellular and molecular genetics at Health Network Laboratories, at a panel discussion on campus this spring.

Snyder and Kaplan examined Association for Molecular Pathology v. Myriad Genetics Inc., an intellectual property case now before the Supreme Court that could have far-reaching implications for the scientific community as well as for ordinary men and women.

At the center of the case are genes BRCA1 and BRCA2, which made headlines recently when actress Angelina Jolie announced that she had tested positive for mutations of the gene and opted for a preventive double mastectomy to reduce her risk of breast cancer.

"Eighty percent of the human genome is patented, but this is one of the few companies that actually enforces their patent to this degree," Kaplan said.

Myriad's monopoly on testing, said Kaplan, means that no one is looking over the company's shoulder to validate its work.

"Myriad developed their test to only look at a few points on the gene, so they would send results back and say an individual didn't have the mutation," she said. "Then in 2008 they came under pressure by the scientific community to test more and it turned out there were some gene rearrangements their tests weren't capturing."

A swath of people tested over a 10-year period, he said, may have been given false results.

"You now have these patients who have cancer and who could have had a mastectomy or hysterectomy during those 10 years if they had received accurate results," Kaplan said.

In the end, the ruling will come down to the Court's interpretation of what can be patented.
"The question isn't whether the genes in your body are patentable," Snyder said. "It's whether taking them out of your body and isolating them makes them substantially different."

Provided by Lehigh University


This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.