CRISPR could reduce inherited risk of high blood pressure

[O]ne out of every three adults in the United States ... has high blood pressure, also called hypertension.

..

Despite our knowledge of the important role of genetics in hypertension, the precise genetic factors that control blood pressure still remain largely unknown because the genetic control of blood pressure is very complex involving many factors distributed throughout your entire genome within each cell of your body. Each genetic factor may function individually or interactively with other factors to control your blood pressure.

To better understand this issue, our lab at the University of Toledo has been working to identify the genetic factors of hypertension by using hypertensive rat models, developed to study human hypertension.

We carefully track the genetic inheritance of hypertension to identify small genetic factors or pieces in the genome that are transmitted from generation to generation.

Once the genetic factors are identified, we replace each piece in its specific genomic location within the hypertensive rat with that same genetic piece from a rat with normal blood pressure. ... If the blood pressure is changed in this congenic strain, then we know this small genetic piece contributes to the control of blood pressure.

The GLP aggregated and excerpted this blog/article to reflect the diversity of news, opinion, and analysis. Read full, original post: <u>UT students studying genetic link to hypertension</u>