Computational drug discovery technique targets microRNAs using genome sequencing

A team of chemists has developed a new computational drug discovery technique that targets microRNAs using genome sequencing. To demonstrate the technique, which the research team believes presents a new and efficient, general-use approach to targeted drug discovery, they developed a drug that caused cancer cells to attack themselves.

The potential for manipulating these microRNAs to control disease genetics was recently called, “the next innovation in pharmaceutical research”, for a number of reasons in a review of microRNA therapeutics. For one, according to the research team at Scripps, it enables the production of small molecule drugs that bind to specific RNA, and those small molecules can typically easily permeate cells — “a property not innate to oligonucleotides”.

Read the full, original story: Data mine your DNA to develop better drugs