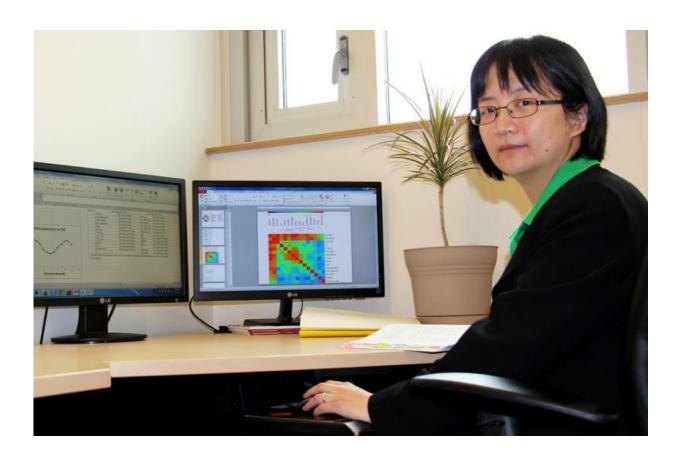


Study questions existence of housekeeping genes

May 18 2015



Bingyun Sun of the Department of Chemistry, SFU

In a study to better understand the role of the body's "housekeeping" genes, scientists in the Departments of Chemistry and Molecular Biology and Biochemistry at Simon Fraser University scoured every existing



database of these genes, to isolate the bona fide genes responsible for basal and essential cellular functions.

To the surprise of the team, led by Dr. Bingyun Sun, only one common gene across 15 datasets examined was found. The results profoundly shift our current—and long-held—view of <u>housekeeping genes</u>, says Sun.

"If what we hypothesize is true, it could have <u>profound implications</u> for the way we think of cellular functions and biodiversity," says Sun. "This study has important implications in the pharmaceutical industry, as housekeeping genes now have the potential to be druggable targets, due to their potential tissue and developmental specificity."

The team's findings were published this week in the scientific journal *PLOS ONE*.

More information: "Do Housekeeping Genes Exist?" *PLoS ONE* 10(5): e0123691. DOI: 10.1371/journal.pone.0123691

Provided by Simon Fraser University

Citation: Study questions existence of housekeeping genes (2015, May 18) retrieved 25 April 2024 from <u>https://phys.org/news/2015-05-housekeeping-genes.html</u>

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.