

Press Invitation

HKU biologists discover cell division requires a balanced level of non-coding RNA for chromosome stability

May 3, 2019

Our genetic code is stored in chromosomes that are composed of DNA. To make sure the genetic code is maintained accurately in all the cells, our cells must replicate and distribute its chromosomes equally to its two daughter cells during every cell cycle. Errors in chromosome separation result in cells with an abnormal number of chromosomes, which may cause spontaneous abortion, genetic diseases or cancers. One chromosomal element that is important for proper chromosome segregation is the centromere, a unique region of DNA on each chromosome that directs chromosome movement during cell division.

Assistant Professor Dr Karen Wing Yee Yuen and Postdoctoral Fellow Dr Yick Hin Ling from School of Biological Sciences, The University of Hong Kong (HKU), discovered that the centromeric DNA is used as a template to produce a non-protein coding RNA (ribonucleic acid), which is essential for chromosome stability. The findings were recently published in one of the top multidisciplinary journals, Proceedings of the National Academy of Sciences of the United States of America (PNAS). This research article is recommended by F1000Prime as an article of special significance and an emerging frontier in the centromere biology field. The two paper co-authors will explain the research findings and significances of the centromeric RNA (cenRNA) in a press conference on May 7 (Tuesday).

Details are as follows:

Date: May 7, 2019 (Tuesday)

Time: 11am

Venue: Rm 6N-11, Kadoorie Biological Sciences Building, HKU Main Campus

Speakers: Assistant Professor Dr Karen Wing Yee Yuen and paper co-author, Postdoctoral Fellow Dr Yick

Hin Ling from the School of Biological Sciences

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