

HOW TO EDIT A GENOME



NSIS Free Public Lecture

February 6 , 2017 7:30 PM

Museum of Natural History Auditorium

Speaker | Dr. Graham Dellaire

Department of Pathology

Department of Biochemistry & Molecular Biology

Dalhousie University

Mistakes in our DNA underlie the development of genetic diseases and a variety of cancers. These markers are called gene mutations, and they occur when DNA damage is not correctly repaired.

Some gene mutations are inherited, such as Cystic Fibrosis and hereditary breast cancer. Others cannot be passed onto our children, but accumulate during our lifetime and contribute to aging and diseases such as cancer. In 2013, a new technology appeared that could accurately edit genes in human cells. This system came from bacteria rather than viruses, and was called CRISPR, a primitive immune system found in many species of bacteria.

In this public lecture, Dr. Dellaire, Professor and Director of Research in the Department of Pathology at Dalhousie University, will discuss recent advances in the use of CRISPR/Cas9 technology to fight cancer and cure genetic diseases.





