Electron microscopic visualization of telomeres, DNA repair factors, and nanoparticles bound to cells

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Frontiers in Biological and Catalysis Sciences
Seminar Series

Presented by…

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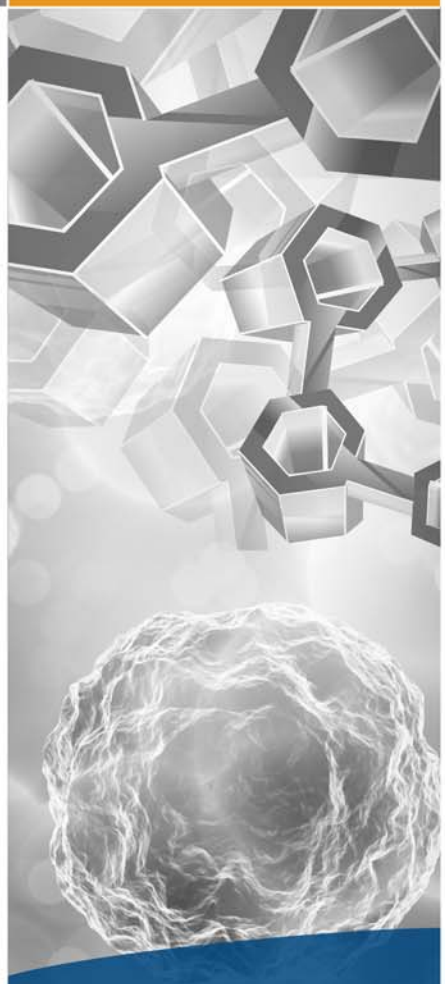

Abstract

High-resolution electron microscopy provides a unique window into the architecture of DNA and DNA-protein complexes. In our studies of the ends of chromosomes (telomeres), we have shown that human chromosomes end in giant duplex loops. The telomeric factors and DNA repair factors involved will be described and EM and biochemical studies used to illustrate how these factors are central to both cancer and aging.

A new approach using cryo methods combined with freeze drying and high-resolution metal coating is providing an exciting means to visualize cell structures including actin networks and nanoparticles being taken up by cells. The method and applications will be discussed.

More info?

See http://www.unc.edu/~jdglab/index.shtml

Date: Tuesday, October 23, 2012

Location: EMSL Auditorium

Time: 9:00 a.m.