NASA Resources for Educators about DNA

Why do NASA scientists and astronauts care about DNA?

Here's why: Space travel exposes astronauts to high levels of DNA damaging radiation. The cells in the body can keep up with this increased damage, repairing the DNA, but only up to a point. When the cells' DNA repair mechanisms fail, the cells either become cancerous or they commit cell suicide, neither of which is good for human health. Thus NASA is very interested in learning about DNA, and about DNA damage & repair processes to maintain human health. And we all are very interested in keeping our DNA healthy here on earth too!

Here is the URL:

http://www.nasa.gov/audience/foreducators/topnav/materials/listbytype/Space Faring Radiation.html

Space Faring: The Radiation Challenge Unit



Here is the Table of Contents from the URL:

Space Faring: The Radiation Challenge Middle School Educator Guide

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Act 2: Space Radiation and Human Health Video

Act 3: Protection From Space Radiation Video

Introduction and Module 1: Radiation Educator Guide

Module 2: Radiation Damage in Living Organisms Educator Guide

Module 3: Radiation Countermeasures Educator Guide

Module 4: Applications to Life on Earth Educator Guide

High School Act 1: What Is Radiation and Where Does It Come From? Video

High School Act 2: Space Radiation and Human Health Video

High School Act 3: Protection From Space Radiation Video

The information in this series was accurate as of the original publication date.