

Nanomedicine



Summary

Four exhibit components highlight nanotechnology's vast potential for revolutionizing the way we diagnose and treat disease, as well as repair damaged tissues.

Learning goals:

- Nanomedicine is the application of nanotechnology to medicine.
- Nanotechnology is being used to develop new diagnostic tools that work better than traditional methods.
- Nanomedicine treatments use materials that are as small (or even smaller) as the tiniest parts of cells in the body.
- Researchers are working on ways to repair tissues with nanotechnology.

Components Included:

Intro to Nanomedicine Video—*What Is Nanomedicine?*

Meet researchers and hear about some of the ways that nanotechnology is changing how we practice medicine.

Detecting Disease

Use *GreeneChip*, an innovative lab-on-a-chip, to test for thousands of disease pathogens simultaneously and diagnose a sick patient.

Treating Disease

Inject tiny particles of gold in the *Gold Nanoshells* interactive and watch as the gold collects in a cancerous tumor and destroys it.

Regenerating Tissues

See how the body heals nerve injuries with and without nanoscaffolds in the *Nanoscaffold* interactive.

(Optional) Nanomedicine Explorer

An interactive, updateable, multimedia kiosk and media package where visitors can explore a variety of topics in cancer nanomedicine.

Exhibit Details

Audience: All ages.

Exhibit Format: Exhibition with four components.

Exhibit Dimensions: 450 Square feet (15' x 15' exhibit space surrounded by a 3' walkway—does not include "Nanomedicine Explorer").