

Detecting Disease



Summary

“Detecting Disease” is a stand-alone interactive component of the *Nanomedicine* exhibition. A copy panel introduces visitors to some of the new ways of detecting and monitoring disease on the nanoscale with genetic material.

GreeneChip

A computer/mechanical interactive, GreeneChip, demonstrates how a newly developed detection tool tests simultaneously for nearly 2,000 pathogens all at the same time. In this interactive, the visitor gets to conduct a lab test. They select one of three sick patients and use a real pipette to add the patient’s blood sample to a glass slide (the GreeneChip). A short animation zooms up close to show how tiny segments of pathogen DNA “stick” to the GreeneChip. The visitor then positions the GreeneChip under the scanner and presses scan. The correct diagnosis is then listed on the computer screen, and the visitor is invited to test another patient.

This exhibit component consists of one copy panel, the tabletop GreeneChip interactive, and a flat-screen monitor slideshow that can be updated to keep the exhibit content current and relevant. Like all of the exhibit components in the *Nanomedicine* package, headphone listening stations with both English and Spanish audio description labels are included. These audio labels serve two functions—to explain the “Big Idea” content of the exhibit and to provide illustrative descriptions of the interactive experience.

Learning goals:

- Nanotechnology is being used to develop new diagnostic tools that work better than traditional methods.

Exhibit Details

Audience: 11 and up

Exhibit Format: Stand-Alone Exhibit Component
Part of *Nanomedicine* Exhibit package

Exhibit Dimensions: 65 ½”w x 32 ½”d x 78”h