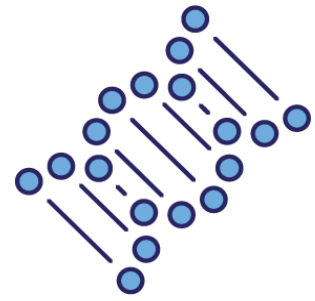


# Exploring Genetics with Kids and Teens Kit



## Activate!

### Introduction to DNA and Genetics

Program Plans in this kit share information about genetics, the study of genes, heredity, and genetic variation. The focus of these programs are engaging and interactive activities that also provide youth with educational information about genetics and their health. **Incredible, Edible DNA** and **DNA Sequence Wristbands** utilize National Library of Medicine resources, like Genetics Home Reference, and other reputable resources to provide foundational information that will contribute to the overall health literacy and health information skills of children and teens.

### National Library of Medicine Resources

#### **National Network of Libraries of Medicine: Summer Reading Initiative**

The National Network of Libraries of Medicine has partnered with the Collaborative Summer Library Program to bring health programming to your library for Summer Reading! Visit to learn more about health programs-in-a-box, webinars, and funding opportunities.

<https://nnlm.gov/initiatives/summer-reading>

#### **Harry Potter's World: Renaissance, Science, Magic, and Medicine**

This online exhibition contains lesson plans, historical information related to themes of Harry Potter, online activities, and galleries. The exhibit also contains a section on the Genetics Traits of Harry Potter that gives students an understanding of genetic inheritance.

<https://nlm.nih.gov/exhibition/harrypottersworld/index.htm>

#### **Genetics Home Reference**

Genetics Home Reference is a website for the public which contains information about genetic conditions and the genes or chromosomes associated with those conditions. The section titled "Help Me Understand Genetics" is a great source for introductory and easy-to-understand information about genetics. The website also has classroom resources that can be used in a teaching environment.

<https://ghr.nlm.nih.gov>

<https://ghr.nlm.nih.gov/primer> (Help Me Understand Genetics)

### Other Governmental and Educational Resources

*This project is funded by the National Library of Medicine, National Institutes of Health, Department of Health and Human Services, under Cooperative Agreement Number UG4LM012342 with the University of Pittsburgh, Health Sciences Library System.*

### **The Gene Scene**

A science website for kids from the American Museum of Natural History. This website features games, hands-on activity ideas, videos, and stories to teach children more about genetics.

<https://bit.ly/genescene>

### **Teach Genetics**

Here you'll find a wealth of resources and information aimed at helping educators bring genetics, bioscience and health alive in the classroom. A companion to the popular Learn.Genetics website, Teach.Genetics offers additional tools and resources to support your curriculum, all free of charge.

<https://teach.genetics.utah.edu>

<https://learn.genetics.utah.edu>

### **National Human Genome Research Institute**

This website features an Education Page which has some great resources, program ideas, and engaging ways to teach students about genetics and genomics. The page also features information about careers in genetics, the Human Genome Project, and DNA Day.

<https://genome.gov>

<https://genome.gov/education>

### **YourGenome.org**

Materials and Instructions for this program were inspired by the “Yummy Gummy DNA” activity from Genome Research Limited at YourGenome.org

<https://yourgenome.org/activities/yummy-gummy-dna>

<https://yourgenome.org/activities/sequence-bracelets>

### **Story Time From Space**

A project of the Global Space Education Foundation where astronauts read to children from space. Watch videos of astronauts reading *Mousetronaut* and *Rosie Revere, Engineer*.

<https://storytimefromspace.com>

### **NASA Twins Study**

Groundbreaking study of the impact of space on genetics identical twin astronauts Scott and Mark Kelly.

<https://nasa.gov/twins-study>

## Collaborate!

Partnerships can expand your library's ability to reach new audiences and showcase experts in health and science.

Some examples include:

- Using program ideas in outreach to schools, recreational centers, and other youth focused events. You can tie in the student's current lessons.
- Incorporate health and science ideas into your summer reading plans. Check out the NNLM Summer Reading Initiative. <https://nnlm.gov/initiatives/summer-reading>

This project is funded by the National Library of Medicine, National Institutes of Health, Department of Health and Human Services, under Cooperative Agreement Number UG4LM012342 with the University of Pittsburgh, Health Sciences Library System.

- Celebrate with National DNA Day at your library with a series of events. The National Human Genome Research Institute has some fun program ideas and you can add your own library's events to the website and connect with others celebrating the day.
- Include themes and ideas about genetics and health into STEM programs for children and teens at your library. Use it as an opportunity to building health literacy that will provide them with information and empower their health decisions in the future.

For help connecting with potential partners in your community, contact your NNLM Regional Medical Library. <https://nnlm.gov/regions>

## Educate!

### Webinars and in-person trainings from NNLM

Information about NNLM Trainings and full course descriptions can be found on our website. Many of the courses are offered throughout the year online; however, feel free to reach out to your local NNLM representative to discuss the possibility of in-person training for your library. <https://nnlm.gov/training>

Some relevant course offerings include:

- Activate, Collaborate, and Educate: Health Outreach and Programming in Your Community
- Beyond an Apple a Day: Providing Consumer Health Information at Your Library
- ABCs of DNA: Unraveling the Mystery of Genetics Information for Consumers
- Genealogy to Genetics: Library Programming to Explore Your Roots