HELPING PATRONS UNRAVEL THE MYSTERY OF GENETIC INFORMATION

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Genetics in the News

CRISPR Gene Editing May Offer Path To Cure For HIV, First Published Report Shows

As Made-To-Order DNA Gets Cheaper, Keeping It Out Of The Wrong Hands Gets Harder

Opioids: Can a Genetic Test Identify an Addict in the Making?

Afraid of Needles? You May Want to Blame Your Genes

No ‘gay gene’: Massive study homes in on genetic basis of human sexuality

Signing up for 23andMe? You might be exposing your family to the FBI

Birth of Baby With Three Parents’ DNA Marks Success for Banned Technique

CRISPR Gene Editing Is Being Tested in Human Patients, and the Results Could Revolutionize Health Care

 Millions of Americans Could Be Identified Even If Using Consumer Genetic Databases—they've Never Taken a DNA Test
Genomic Health Literacy

- Lack biology basics
- Lack mathematical concepts
- Lower literacy
Leading causes of death

1. Heart disease: 647,457
2. Cancer: 599,108
3. Accidents (unintentional injuries): 169,936
4. Chronic lower respiratory diseases: 160,201
5. Stroke (cerebrovascular diseases): 146,383
6. Alzheimer’s disease: 121,404
7. Diabetes: 83,564
8. Influenza and pneumonia: 55,672
9. Nephritis, nephrotic syndrome, and nephrosis: 50,633
10. Intentional self-harm (suicide): 47,173
Jean’s Genetic Testing Timeline

• Age 1 day: **newborn** testing for a few serious childhood diseases

• Age 30: **carrier** testing (with their partner) before getting pregnant

• Age 35: **predictive testing** when sibling develops breast cancer at a young age

• Age 45 **direct to consumer** genetic testing to investigate ancestry

• Age 65 **pharmacogenomics** testing when medication wasn’t effective
Testing for...

Map My Gene
Create the Champion in Your Child through DNA Mapping

Pheramor

ORIG3N
SUPERHERO DNA Test

KARMA GENES
meet yourself

Genomic Express

Harness your natural ability through personalized genomics.
Questions to ask before using a Direct to Consumer Genetic Test

- Is the test right for me?
- What are the company claims?
- What do I hope to find out?
- Am I ready to hear something unexpected?
- Who will the results affect besides me?
- What happens to my genetic information?
Societal Concerns

- Genetic discrimination
- Health disparities
- Intellectual property
- Privacy and Security
- Regulation of genetic tests
- Human enhancement
ABCs of DNA

UNRAVELING THE MYSTERY OF GENETICS
INFORMATION FOR CONSUMERS

October 19 – November 15
Register: https://nnlm.gov/classes/abcs-dna

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