

# ΒΑΣΕΙΣ ΔΕΔΟΜΕΝΩΝ



[ncbi.nlm.nih.gov](http://ncbi.nlm.nih.gov)

**N**ational **C**enter for **B**iot**e**chnology **I**nformation



- Gene
- Blast



- **SNP**

By gene (e.g. BRCA1), by rs (e.g. [rs12427078](#))

Limits (function class)



<http://www.ensembl.org>

Π.χ. Ποια γονίδια εντοπίζονται σε μία κρίσιμη περιοχή (π.χ. D10S597-D10S554)  
Πληροφορίες για ένα γονίδιο (π.χ. BRCA2)



**11 Years Ago**

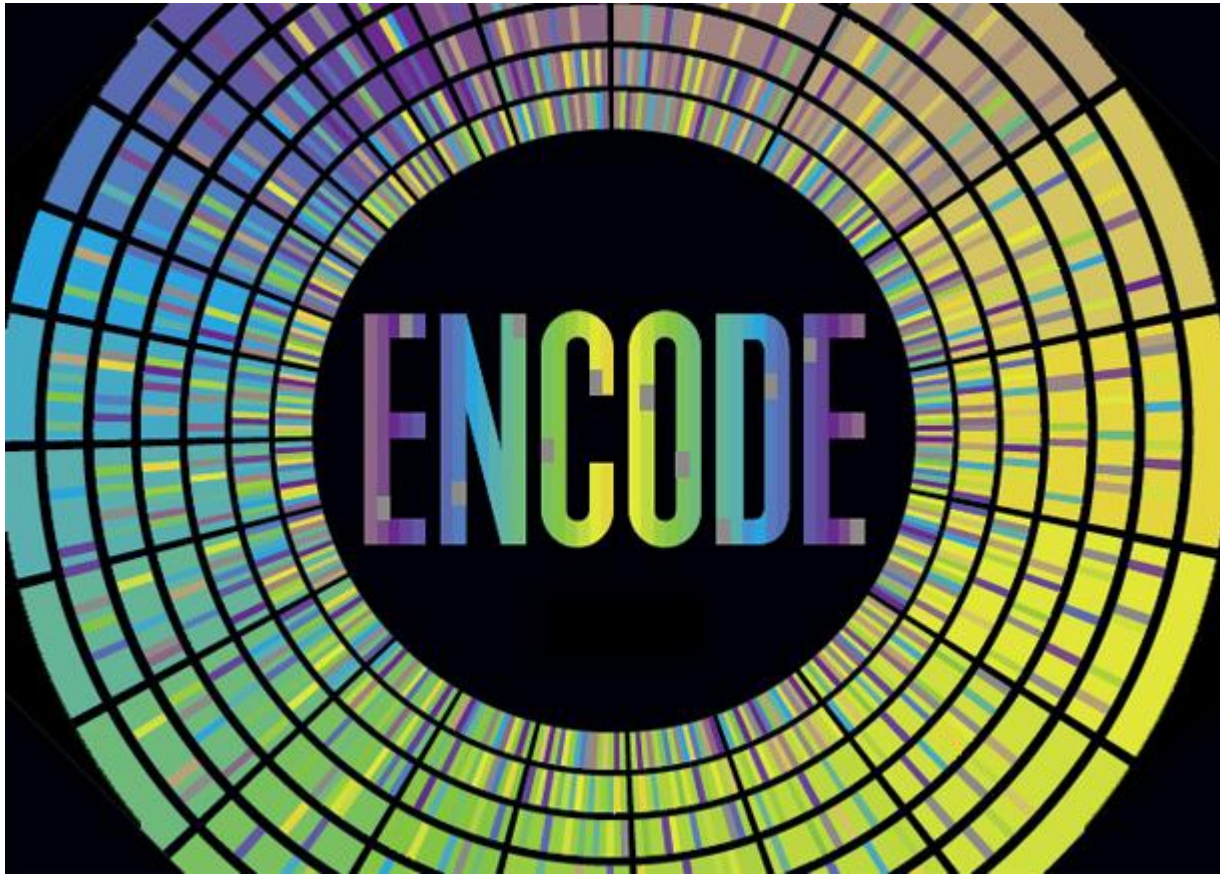
**The draft  
human genome**

### **OUR GENOME UNVEILED**

Unless the human genome contains a lot of genes that are opaque to our computers, it is clear that we do not gain our undoubted complexity over worms and plants by using many more genes. Understanding what does give us our complexity — our enormous behavioural repertoire, ability to produce conscious action, remarkable physical coordination (shared with other vertebrates), precisely tuned alterations in response to external variations of the environment, learning, memory ... need I go on? — remains a challenge for the future.

*David Baltimore*

*From Nature 15 February 2001*



The **E**ncyclopedia **o**f **D**NA **E**lements

**Σκοπός:** ο χαρακτηρισμός όλων των λειτουργικών στοιχείων του γονιδιώματος του ανθρώπου

ΥΠΟΜΕΝΕΙΣ ΣΕΙΡΕΣ ΤΩΝ ΠΡΟΤΕΡΩΝ ΠΡΩΤΩΝ ΑΠΟ ΤΙΣ 30 ΚΑΙΟΜΕΝΕΣ ΤΩΝ.

ENCODE was designed to pick up where the Human Genome Project left off. Although that massive effort revealed the blueprint of human biology, it quickly became clear that the instruc-

scape. Many biologists suspected that the information responsible for the wondrous complexity of humans lay somewhere in the 'deserts' between the genes. ENCODE, which started in 2003, is a massive data-collection effort designed to populate this terrain. The aim is to catalogue the 'functional' DNA sequences that lurk there, learn when and in which cells they are active and trace their effects on how the genome is packaged, regulated and read.

Σεπτέμβριος 2012: 30 δημοσιεύσεις με τα αποτελέσματα του προγράμματος (ελεύθερα προσβάσιμα)

Ταυτοποίηση λειτουργικών στοιχείων στο 80% του γονιδιώματος του ανθρώπου

NEWS FEATURE

# THE HUMAN ENCYCLOPAEDIA

BY BRENDAN MAHER

FIRST THEY SEQUENCED IT. NOW THEY HAVE SURVEYED ITS HINTERLANDS. BUT NO ONE KNOWS HOW MUCH MORE INFORMATION THE HUMAN GENOME HOLDS, OR WHEN TO STOP LOOKING FOR IT.

***“The results imply that sequencing studies focusing on protein-coding sequences risk missing crucial parts of the genome.”***



32 INSTITUTES

# BY THE NUMBERS

THOMAS POROSTOCKY, SOURCE: MEETINGZONE



The ENCODE project involved hundreds of people from around the world, and a lot of editing, disk space and phone calls.

**442** CONSORTIUM MEMBERS

DATA



**1,649**  
EXPERIMENTS



ENCODE Wiki

WIKI  
CONTENT  
PAGES

**11,972**



**15 TB**

DISK SPACE USED

**18,500**

PAGE EDITS SINCE 2008

**248,140**

VIEWS

TELECONFERENCING MAY 2008 TO JUNE 2012

**675**

CALLS MADE



**13**

PARTICIPANTS  
PER CALL



MINUTES PER CALL  
PER PARTICIPANT

**292**

PERSON-DAYS SPENT  
ON CONFERENCE CALLS

TOTAL COST OF TELECONFERENCING = £49,310.54

[Nature.com/encode](http://Nature.com/encode)