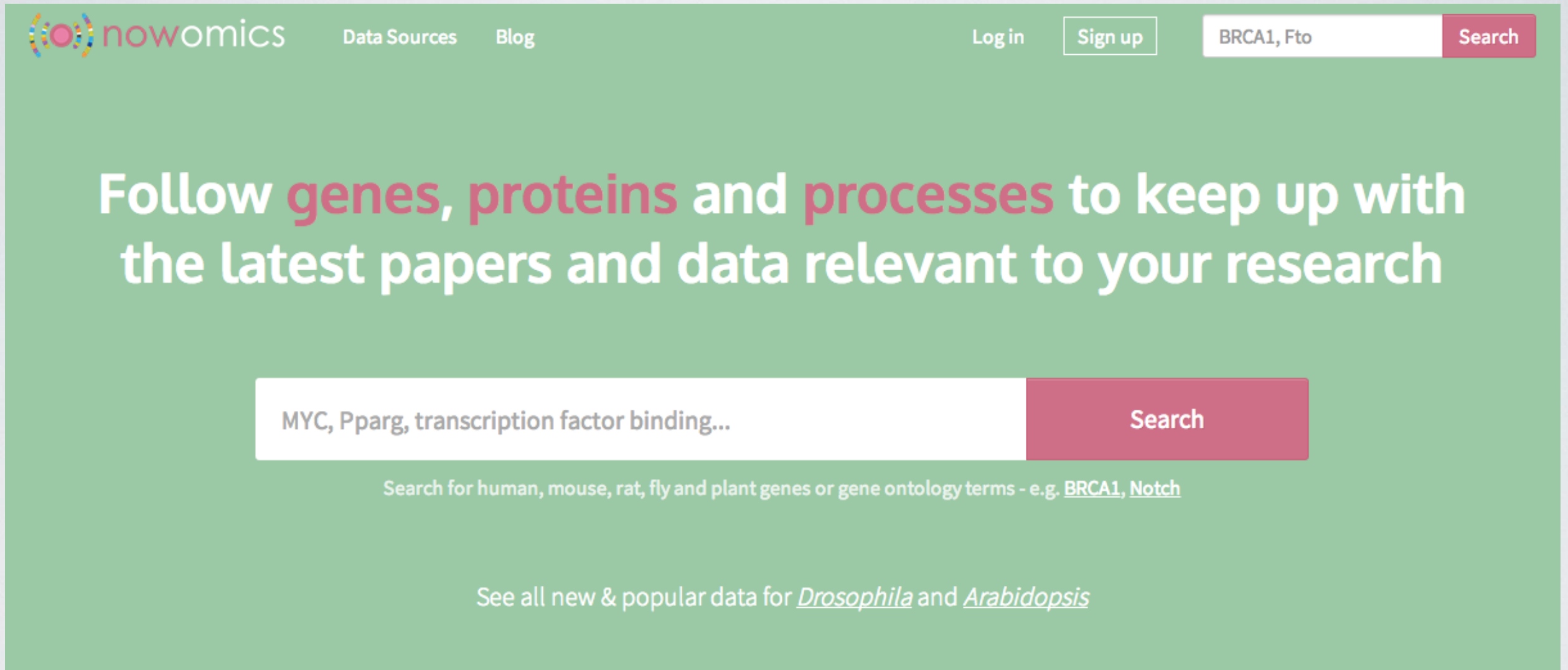


nowomics.com



The screenshot shows the nowomics.com website with a green header. The header contains the nowomics logo, navigation links for 'Data Sources' and 'Blog', and user options for 'Log in' and 'Sign up'. A search bar in the top right contains the text 'BRCA1, Fto' and a 'Search' button. The main content area has a large heading: 'Follow **genes**, **proteins** and **processes** to keep up with the latest papers and data relevant to your research'. Below this is a search input field with the placeholder text 'MYC, Pparg, transcription factor binding...' and a 'Search' button. A note below the search bar states: 'Search for human, mouse, rat, fly and plant genes or gene ontology terms - e.g. BRCA1, Notch'. At the bottom of the main area, it says: 'See all new & popular data for Drosophila and Arabidopsis'.

nowomics Data Sources Blog Log in Sign up BRCA1, Fto Search

Follow **genes**, **proteins** and **processes** to keep up with the latest papers and data relevant to your research

MYC, Pparg, transcription factor binding... Search

Search for human, mouse, rat, fly and plant genes or gene ontology terms - e.g. BRCA1, Notch

See all new & popular data for Drosophila and Arabidopsis

@nowomics

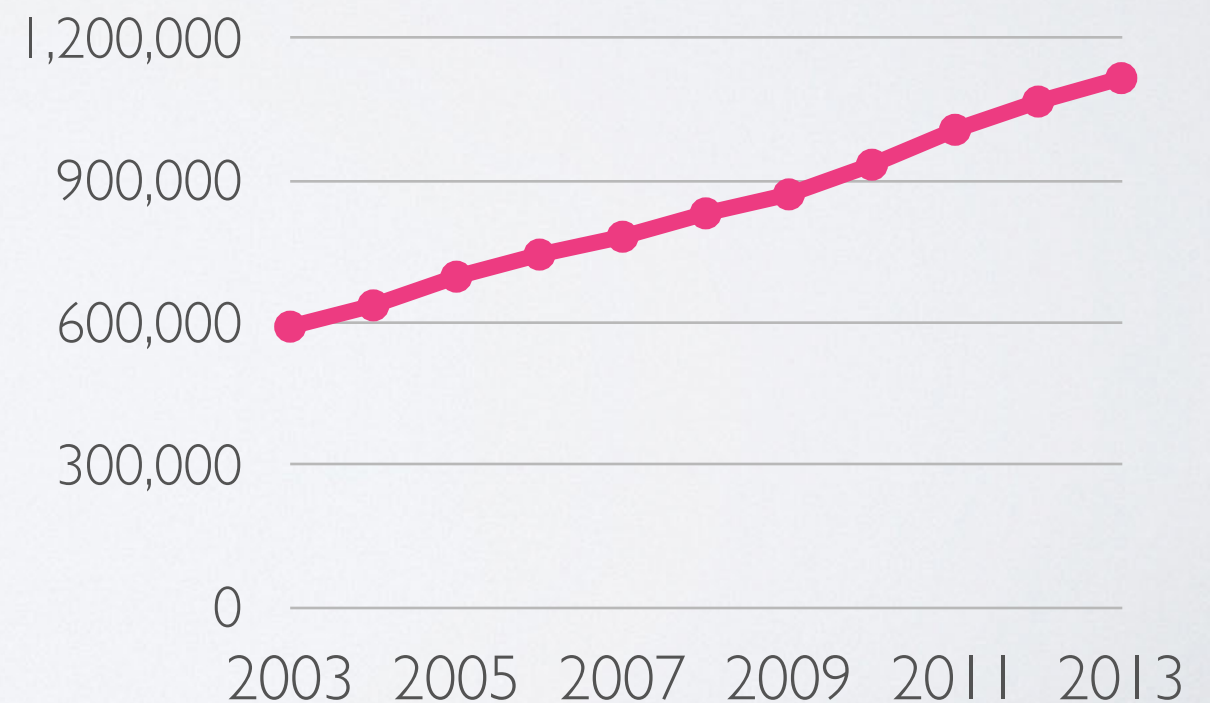
PubMed

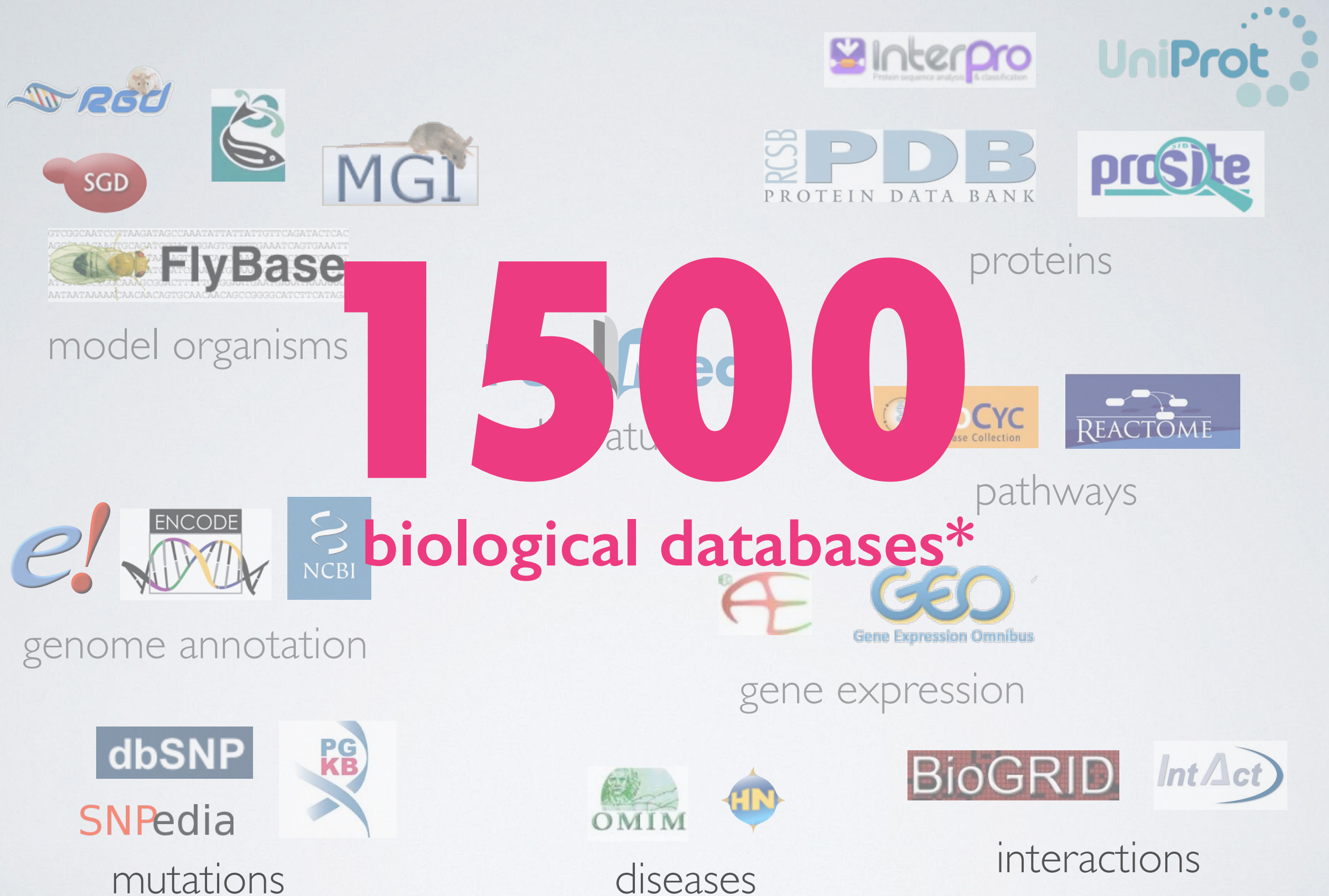
index of biomedical literature

~20,000 new articles every week

one article every 30 seconds

rate doubled
in last ten years





* Nucleic Acids Research 2014 Database Issue

How do I keep track of it all?

Notch fly gene

Follow

BRCA2 human gene

Follow

neuron development process

Follow

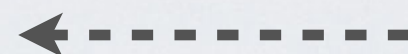
In future: Diseases, Pathways, Authors, Techniques



literature

& databases

UniProt



link to original
data source



Fetch data
every day

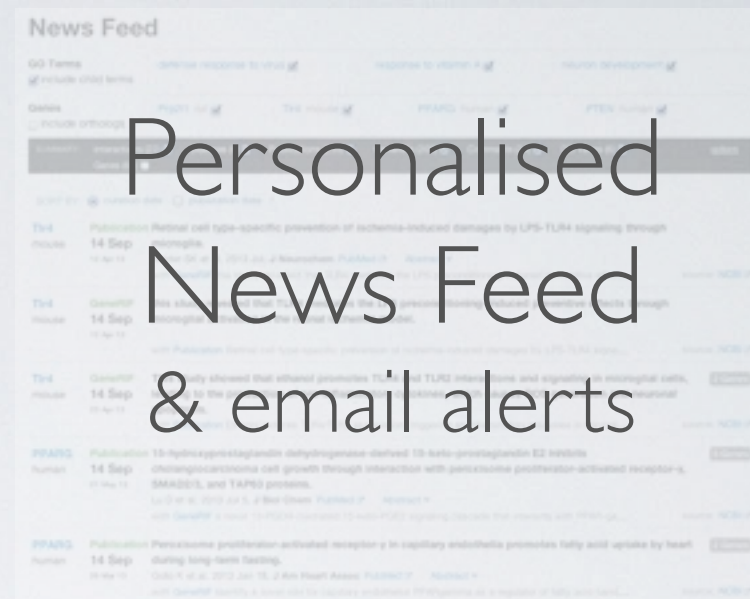
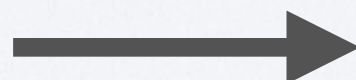


Text-mining on
new abstracts



nowomics

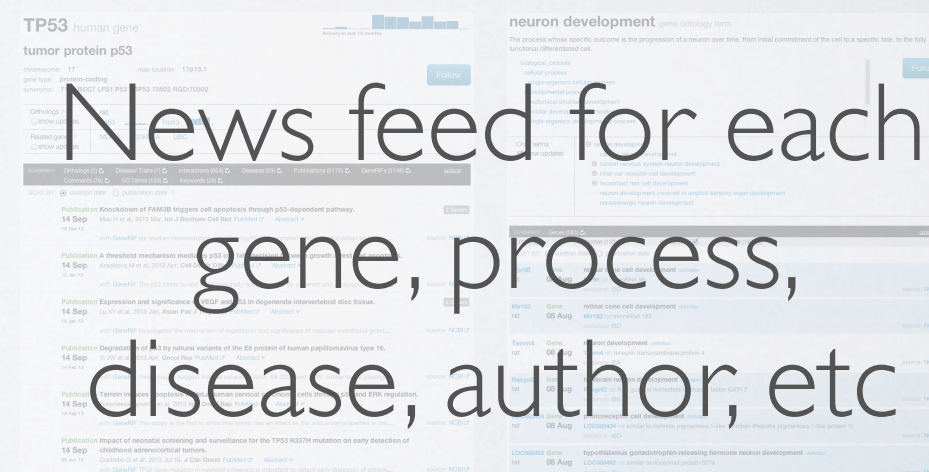
Work out what's
changed



Personalised
News Feed
& email alerts



Users follow what
they work on



News feed for each
gene, process,
disease, author, etc

BRCA2 human gene



breast cancer 2, early onset

chromosome: **13** map location: **13q12.3** gene type: **protein-coding**
synonyms: **BRCC2 BROVCA2 FACD FAD FAD1 FANCB FANCD FANCD1 GLM3 PNCA2**

Follow

Orthologs? <input type="checkbox"/> show updates	rat Brca2	mouse Brca2
Related genes? <input type="checkbox"/> show updates	BRCA1 RAD51 PALB2 FANCD2 CHEK2	

Show updates from last:

SUMMARY: **Disease/ Trait (1)** ☒ **Interactions (4)** ☒ **Disease (1)** ☒ **Publications (303)** ☒ **GeneRIFs (79)** ☒ **Comments (7)** ☒ **GO Term (1)** ☒ [options](#)

Latest

Popular

GeneRIF
15 Mar

p53 suppresses BRCA2-stimulated ATPase and strand exchange functions of human RAD51 to control homologous recombination.

3 Genes

with: [Publication](#) p53 suppresses BRCA2-stimulated ATPase and strand exchange functions of human RAD51.

source: [NCBI](#)

Publication
13 Mar

Reversing Platinum Resistance in High-Grade Serous Ovarian Carcinoma: Targeting BRCA and the Homologous Recombination System.

2 Genes

Wiedemeyer WR, Beach JA, Karlan BY

[Front Oncol](#) - Mar 2014

[Abstract](#) *← open abstract inline*

[PubMed](#) →

evidence: automatic ?

Publication
11 Mar

Homology-directed repair of DNA nicks via pathways distinct from canonical double-strand break repair.

2 Genes

Davis L, Maizels N

[Proc Natl Acad Sci U S A](#) - Mar 2014

[Abstract](#)

[PubMed](#) →

evidence: automatic ?

2

Search all recent data and paper abstracts for this gene - e.g. signaling, expression

Search

Publication

12 Mar

Adipose-specific knockout of Seipin/Bscl2 results in progressive lipodystrophy.

Liu L, Jiang Q, Wang X, Zhang Y, Lin RC, Lam SM, Shui G, Zhou L, Li P, Wang Y, [et al](#)

Diabetes - Mar 2014

[PubMed](#) →

5 Genes

▼ Abstract

✓ Gene (5) ✓ Species (2)

Berardinelli-Seip congenital lipodystrophy type 2 (BSCL2) is the most severe form of human lipodystrophy, characterized by an almost complete loss of adipose tissue. BSCL2/SEIPIN gene, which is involved in the physiological function of SEIPIN in adipocytes. Seipin knock-out mice (ASKO mice) exhibit severe lipodystrophy, tissue inflammation, progressive insulin resistance and microarray analyses revealed as increased endoplasmic reticulum stress. Interestingly, the ASKO mice almost completely phenocopy the fat-specific Pparγ knock-out (FKOγ) mice. Rosiglitazone treatment significantly improved a number of metabolic parameters of the ASKO mice, including insulin sensitivity. Our results therefore demonstrate a critical role of SEIPIN in maintaining lipid homeostasis and function of adipocytes, and reveal an intimate relationship between SEIPIN and PPARY.

BSCL2 human gene

Berardinelli-Seip congenital lipodystrophy 2 (seipin)

Activity in last 12 months

[View report](#)

evidence: automatic ?



Latest

Popular

Popularity ranking is based on Twitter and Mendeley data retrieved from altmetric.com

- | | | | |
|----------|-------------------------------|--|--|
| <p>6</p> | <p>Publication
12 May</p> | <p>Establishment and genetic characterization of six unique tumor cell lines as preclinical models for sinonasal squamous cell carcinoma.</p> <p>García-Inclán C, López-Hernández A, Alonso-Guervós M, Allonca E, et al</p> <p>> Abstract</p> <p>evidence: automatic ?</p> | <p>5 Genes</p> <p>Sci Rep - May 2014</p> <p>PubMed →</p> |
| <p>1</p> | <p>Publication
15 May</p> | <p>High-throughput mutation profiling improves diagnostic stratification of sporadic medullary thyroid carcinomas.</p> <p>Simbolo M, Mian C, Barollo S, Fassan M, Mafficini A, Neves D, Scardoni M, et al</p> <p>> Abstract</p> <p>evidence: automatic ?</p> | <p>4 Genes</p> <p>Virchows Arch - May 2014</p> <p>PubMed →</p> |
| <p>3</p> | <p>Publication
12 May</p> | <p>Applicability of next-generation sequencing to decalcified formalin-fixed and paraffin-embedded chronic myelomonocytic leukaemia samples.</p> <p>Bernard V, Gebauer N, Dinh T, Stegemann J, Feller AC, Merz H</p> <p>> Abstract</p> <p>evidence: automatic ?</p> | <p>3 Genes</p> <p>Int J Clin Exp Pathol - Mar 2014</p> <p>PubMed →</p> |

19
31

data from altmetric.com

HOW IS THIS DIFFERENT?

User experience

- read abstracts inline not links in email
- search, popularity

Dictionaries to find genes/terms

- many names for same gene: ERBB2/HER2

Biology built in

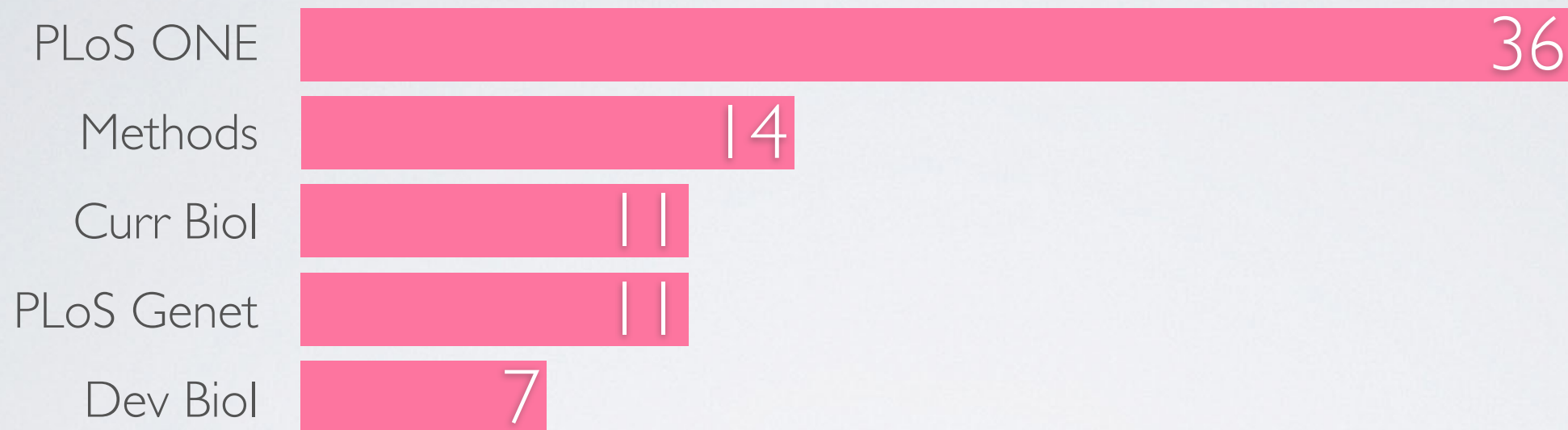
- view related data & orthologs in feed

Many data types

- annotation and experimental data
- future: Arxiv, figshare, gene expression, diseases

STATS & TRENDS

Drosophila papers, March 2014: 390



Most active genes

Genes with the most updates in the last 30 days.

Human

Mouse

Rat

Fly

Arabidopsis

Akt1 Apoe Bcl2 Casp3 Ccl2 Ccnd1 Cd4 Csf2 Cttnb1 Egfr Esr1 Foxp3
 Gt(ROSA)26Sor Hif1a Ifng Il10 Il17a Il1b Il2 Il4 Il6 Jun Lep Mapk1 Mapk14
 Mapk3 Mapk8 Mki67 Mmp2 Mmp9 Mtor Myd88 Nfe2l2 Nfkb1 Nos2 Pik3r1 Pparg Prkdc
 Pten Sirt1 Sox2 Stat3 Tgfb1 Tlr2 Tlr4 Tnf Tnfsf13 Trp53 Vegfa Zpr1

STAT3 human gene





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