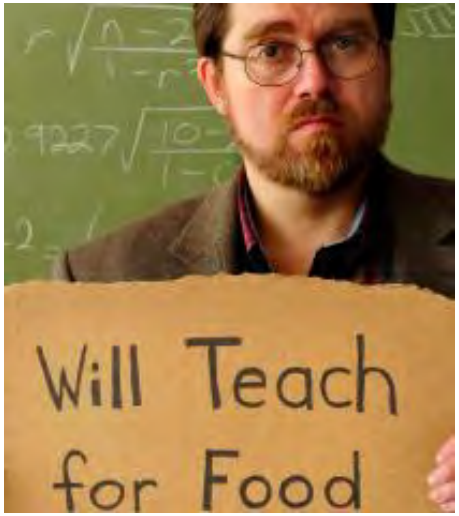
Flickschusterei in der infrastrukturellen Steinzeit: Wohin mit den Forschungsdaten?

Björn Brembs
Universität Regensburg
http://brembs.net

WISSEN SCHAFFEN



Wissenschaftler produzieren Publikationen, Daten und Software

KRISE I

Dysfunktionale Literatur

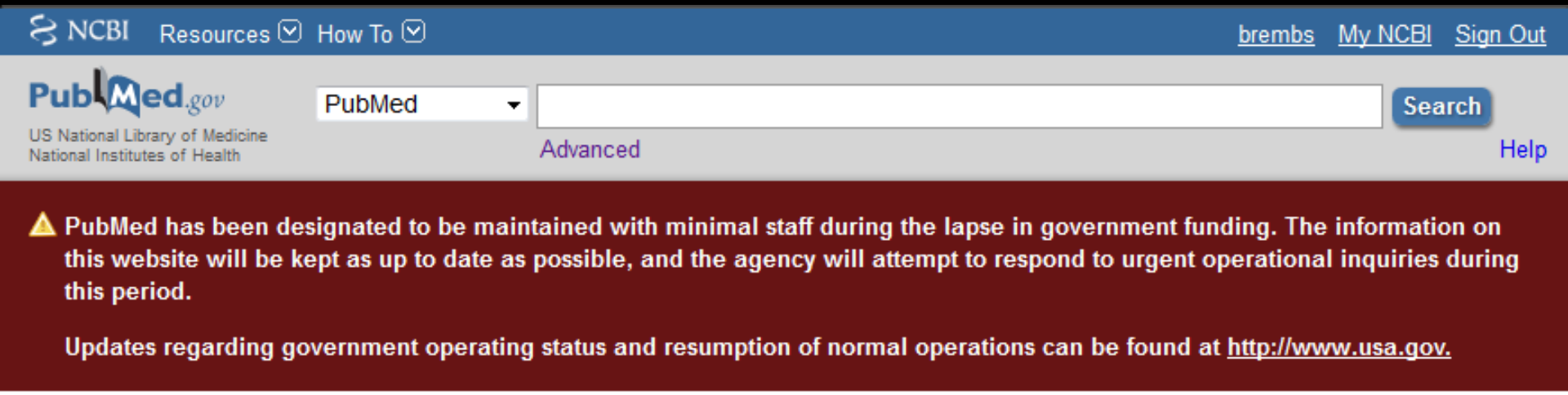
Dysfunktionale Literatur

Digitale Steinzeit!

- Schwer zugänglich
- Keine globale Suche
- Keine Hyperlinks
- Keine Daten-visualisierung
- Keine Text-Normen
- (Fast) keine Statistik
- Kein Text/Daten-Mining
- Keine effektive Sortier-, Filter- oder Entdeckungs-Funktionalität
- Keine wissenschaftl. Bewertung
- Keine soziale Vernetzung
- etc.

KRISE II

Wissenschaftliche Daten in Gefahr


NCBI
Resources
How To
brembs
My NCBI
Sign Out
PubMed.gov
US National Library of Medicine
National Institutes of Health
PubMed
Search
Advanced
Help
PubMed has been designated to be maintained with minimal staff during the lapse in government funding. The information on this website will be kept as up to date as possible, and the agency will attempt to respond to urgent operational inquiries during this period.
Updates regarding government operating status and resumption of normal operations can be found at http://www.usa.gov.

nature International weekly journal of science

NATURE | NEWS

Databases fight funding cuts

Online tools are becoming ever more important to biology, but financial support is unstable.

Monya Baker

05 September 2012

About TAIR
- About TAIR
- TAIR Staff
- TAIR Board
- TAIR Data Sources
- Hyperlinking to TAIR
- Citing TAIR
- TAIR Database Schema
- Publications
- TAIR Software
- TAIR Database Statistics
- TAIR Usage Statistics
- TAIR Presentations (ppt)

TAIR Funding Updates and Discussion Forum

Jump to Comments

TAIR launches new corporate sponsorship program (7/23/2010)

Dear TAIR user community,

To help us through the current funding crisis we recently established a new TAIR corporate sponsorship program. We feel that this approach is preferable to implementing a subscription requirement for the private sector because it will allow us to keep TAIR open and free of login requirements, facilitating the free exploration of data by all scientists. Two companies (Dow AgroSciences and Syngenta) and one research organization (Gregor Mendel Institute) have already become TAIR sponsors. More information can be found on our sponsorship page.

TAIR Funding Crisis (10/16/2009)

Dear TAIR user community,

Swiss Institute of Bioinformatics

Search UniProtKB for Go Clear

ExPASy Proteomics Server

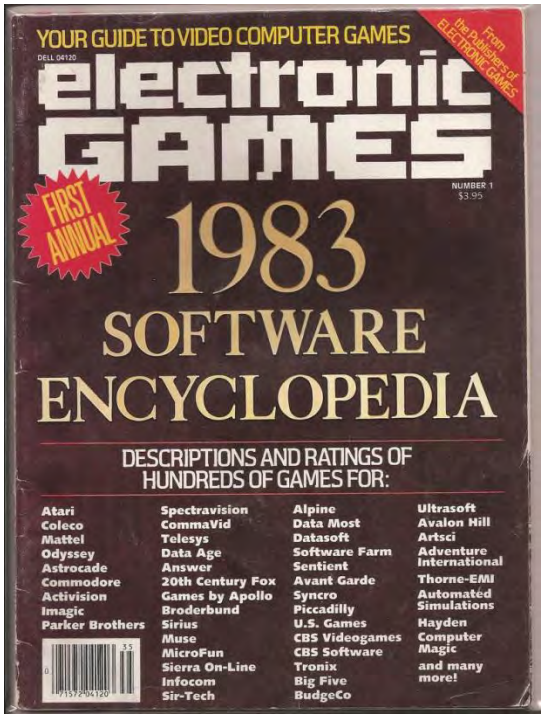
Databases Tools Services Mirrors About Contact

You are here: ExPASy CH > Databases > Around UniProtKB

SWISS-PROT should have been 10 years old in July 1996, but it may disappear on June 30, 1996

Due to funding problems, SWISS-PROT as well as PROSITE, and the ENZYME nomenclature databases will disappear on June 30, 1996 if no solution is found before that date. The ExPASy WWW server and all services associated with it will also shut down. The distribution of the SWISS-2DPAGE database will also be discontinued. Other external databases, WWW services and software packages that depend on SWISS-PROT,

KRISE III



Inexistente Software-Archive

Science 2 December 2011:
Vol. 334 no. 6060 pp. 1226-1227
DOI: 10.1126/science.1213847

PERSPECTIVE

Reproducible Research in Computational Science

Roger D. Peng

± Author Affiliations

To whom correspondence should be addressed. E-mail: rpeng@jhsph.edu

ABSTRACT

Computational science has led to exciting new developments, but the nature of the work has exposed limitations in our ability to evaluate published findings. Reproducibility has the potential to serve as a minimum standard for judging scientific claims when full independent replication of a study is not possible.

NATURE | PERSPECTIVES

previous article next article

The case for open computer programs

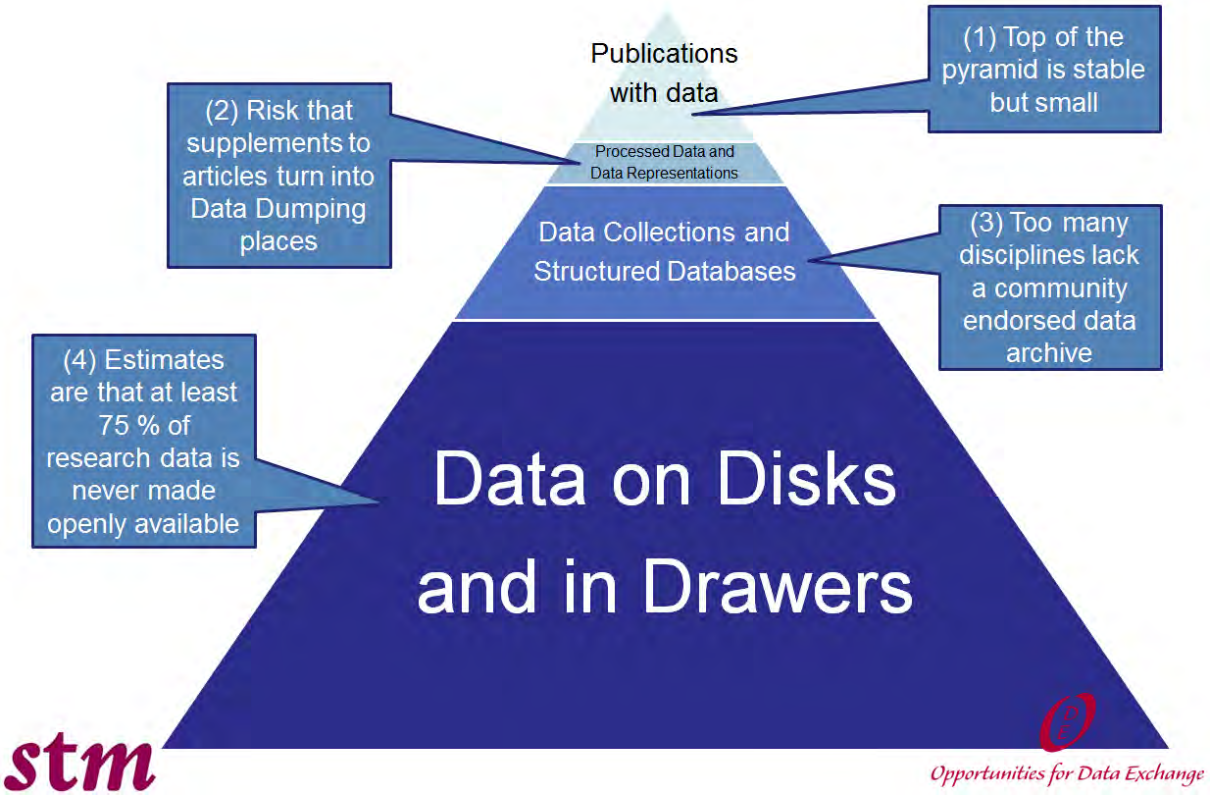
Darrel C. Ince, Leslie Hatton & John Graham-Cumming

Affiliations | Contributions | Corresponding author

Nature **482**, 485–488 (23 February 2012) | doi:10.1038/nature10836
Received 09 May 2011 | Accepted 05 January 2012 | Published online 22 February 2012

Scientific communication relies on evidence that cannot be entirely included in publications, but the rise of computational science has added a new layer of inaccessibility. Although it is now accepted that data should be made available on request, the current regulations regarding the availability of software are inconsistent. We argue that, with some exceptions, anything less than the release of source programs is intolerable for results that depend on computation. The vagaries of hardware, software and natural language will always ensure that exact reproducibility remains uncertain, but withholding code increases the chances that efforts to reproduce results will fail.

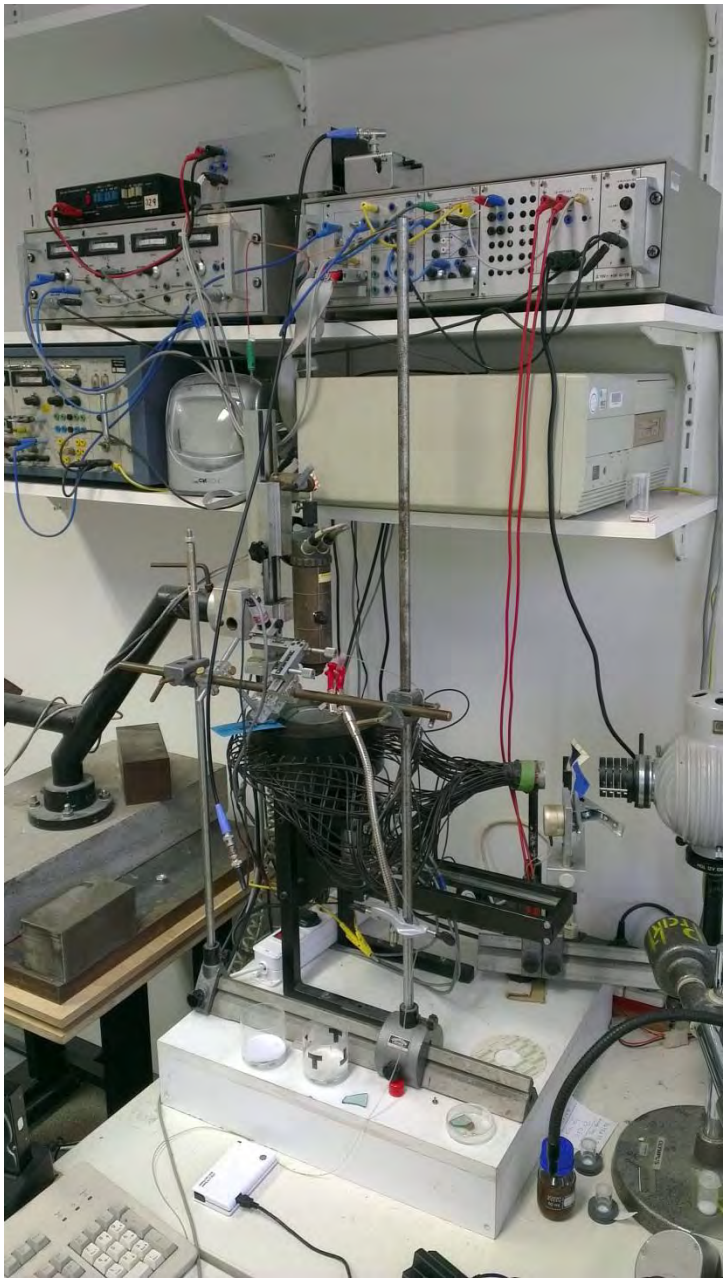
Umgang mit Forschungsdaten „*small data – long tail*“

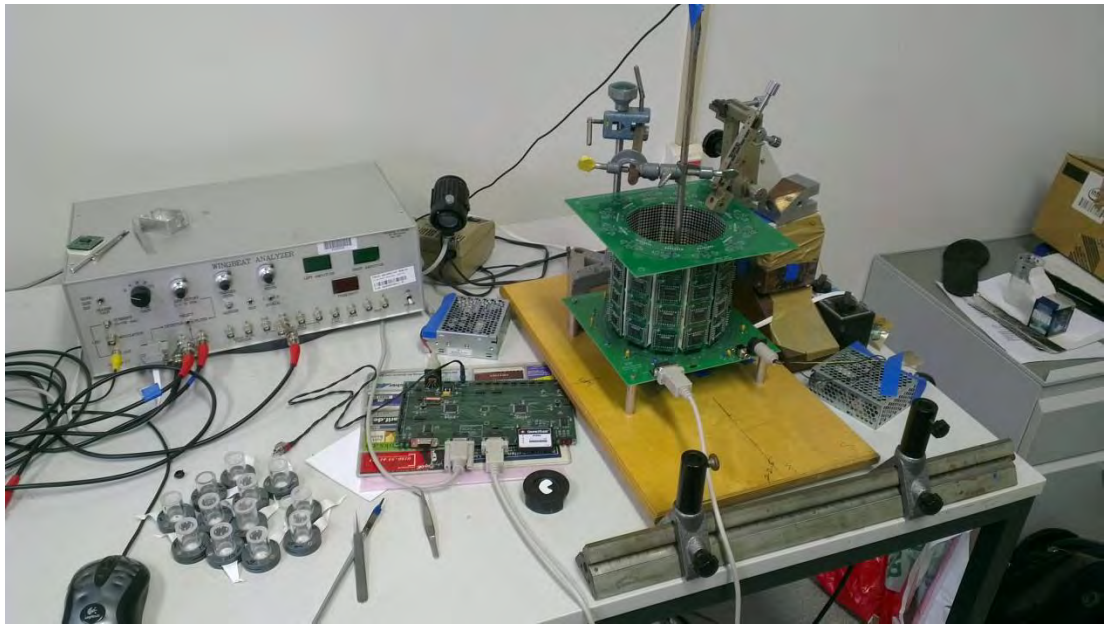


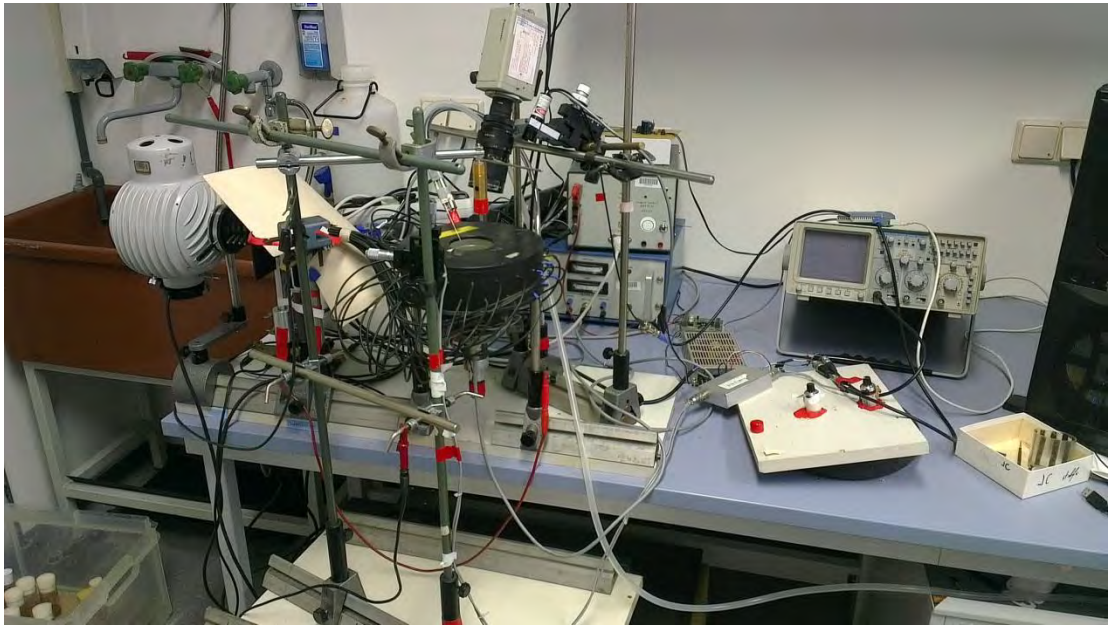
Report on Integration of Data and Publications, ODE Report 2011
http://www.alliancepermanentaccess.org/wp-content/plugins/download-monitor/download.php?id=ODE+Report+on+Integration+of+Data+and+Publications

JULIEN COLOMB

Flickschusterei!



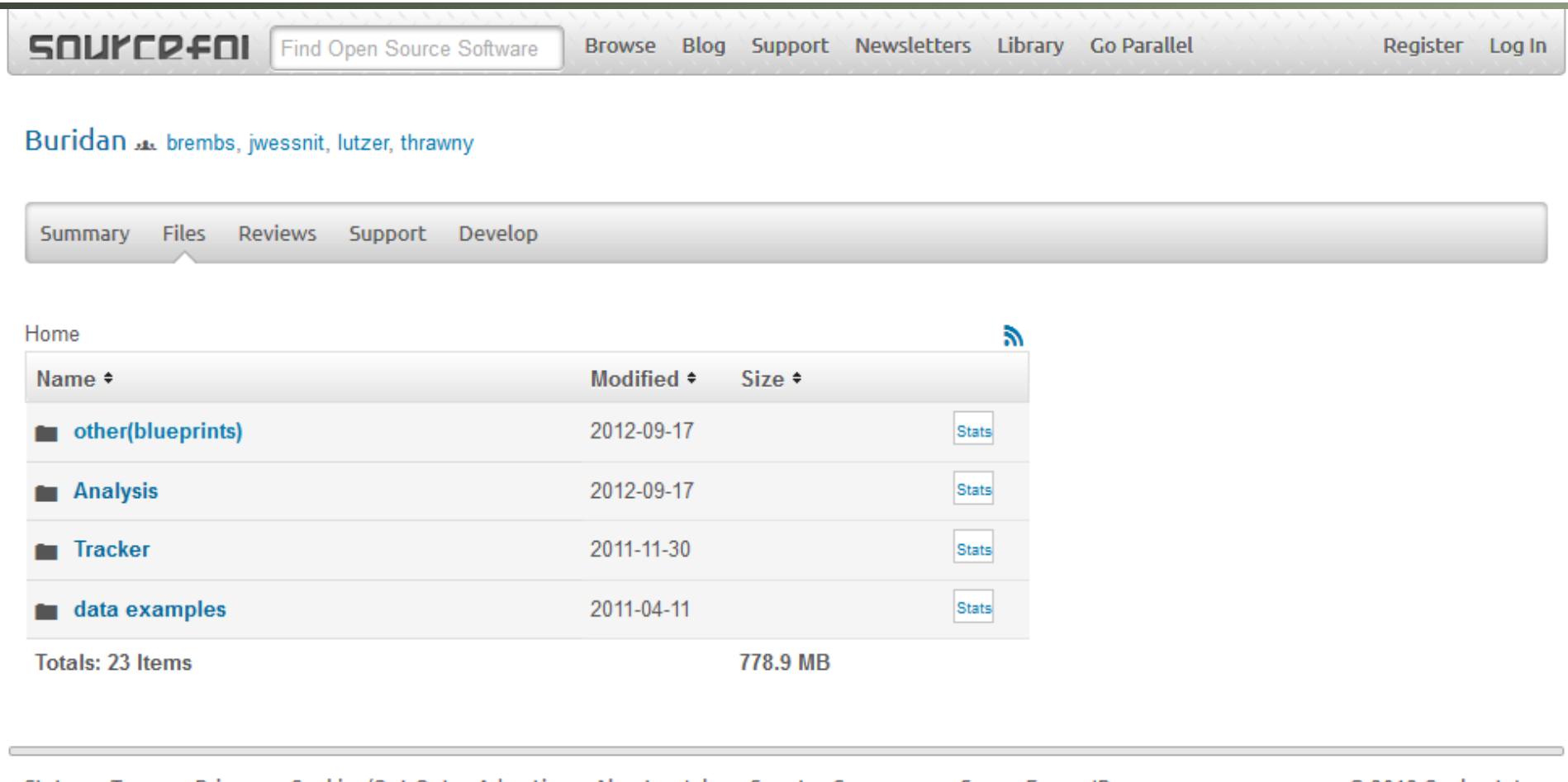

WINGBEAT ANALYZER



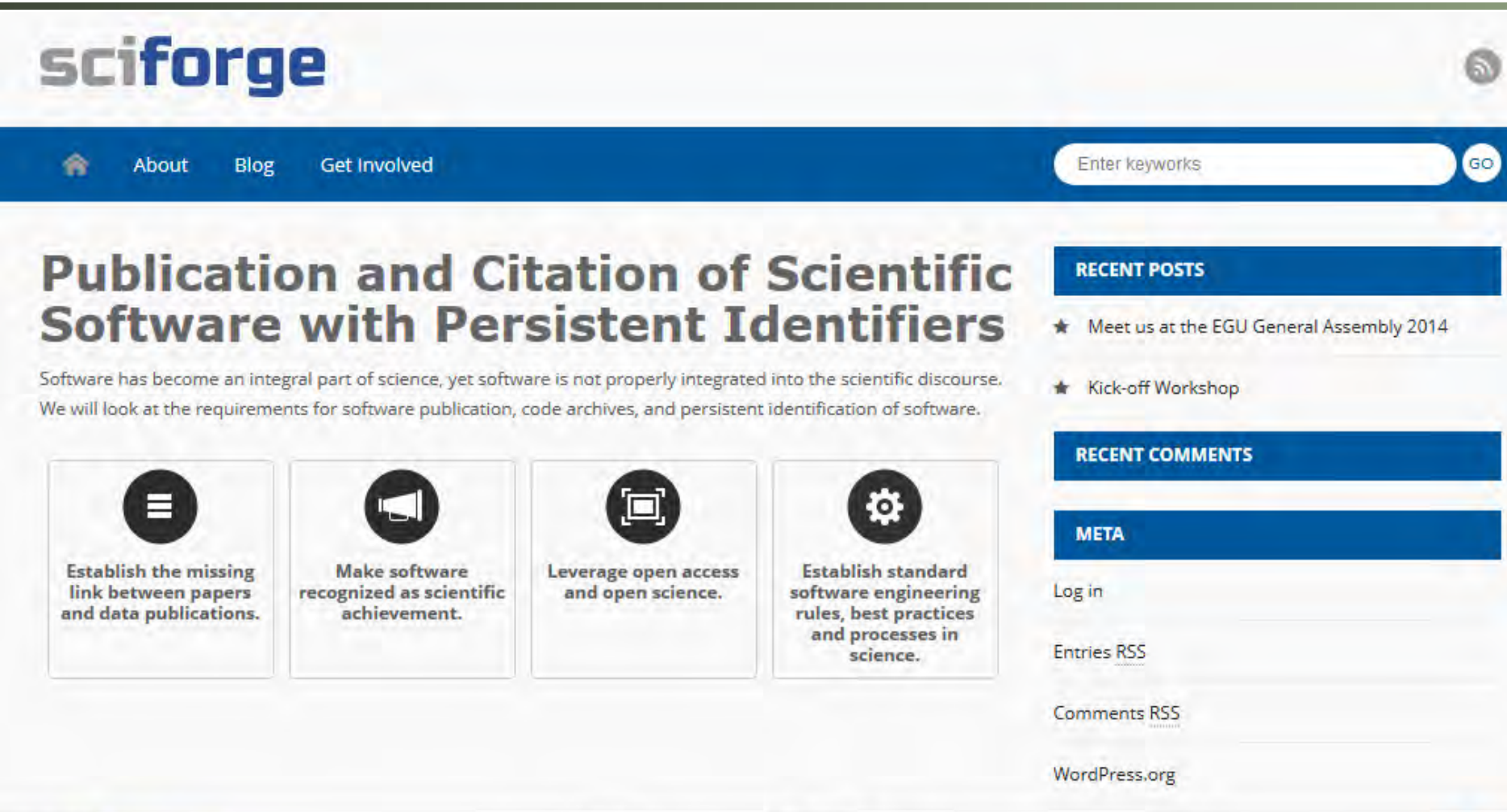
Software zur Experimentkontrolle und Datenerfassung

Software zum Analysieren und Visualisieren der Daten

buridan.sourceforge.net



Software mit Persistenten Identifikatoren



RESEARCH ARTICLE OPEN ACCESS

Open Source Tracking and Analysis of Adult *Drosophila* Locomotion in Buridan's Paradigm with and without Visual Targets

Article | Metrics | Related Content | Comments: 1

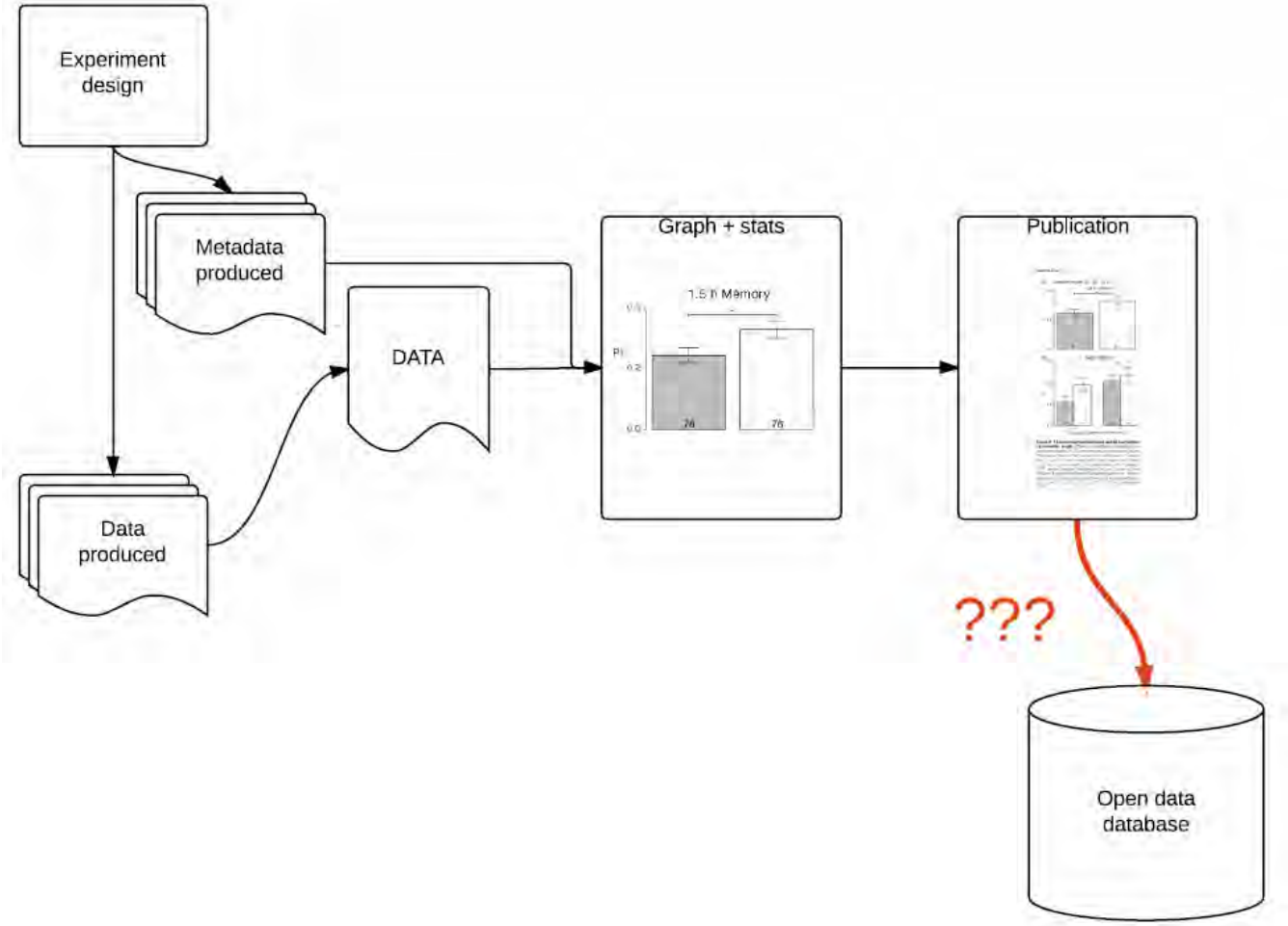
Julien Colomb[1*], **Lutz Reiter**[1], **Jedrzej Blaszkiewicz**[1], **Jan Wessnitzer**[2], **Bjoern Brembs**[1,3]

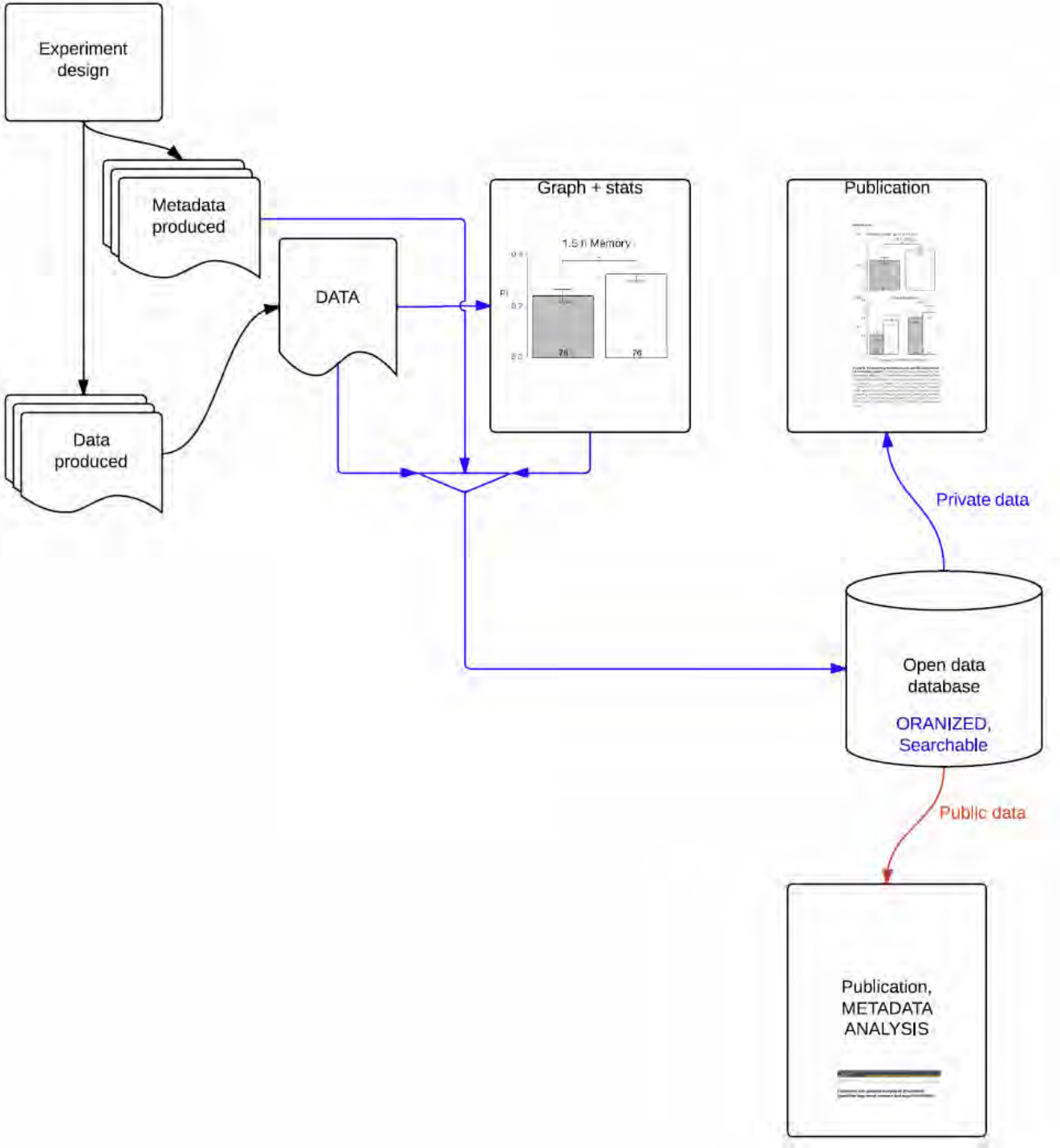
1 FB Biologie, Chemie, Pharmazie, Institut für Biologie-Neurobiologie, Freie Universität Berlin, Berlin, Germany, **2** Institute for Perception, Action and Behaviour, School of Informatics, University of Edinburgh, Edinburgh, United Kingdom, **3** Department of Genetics, Universität Leipzig, Leipzig, Germany

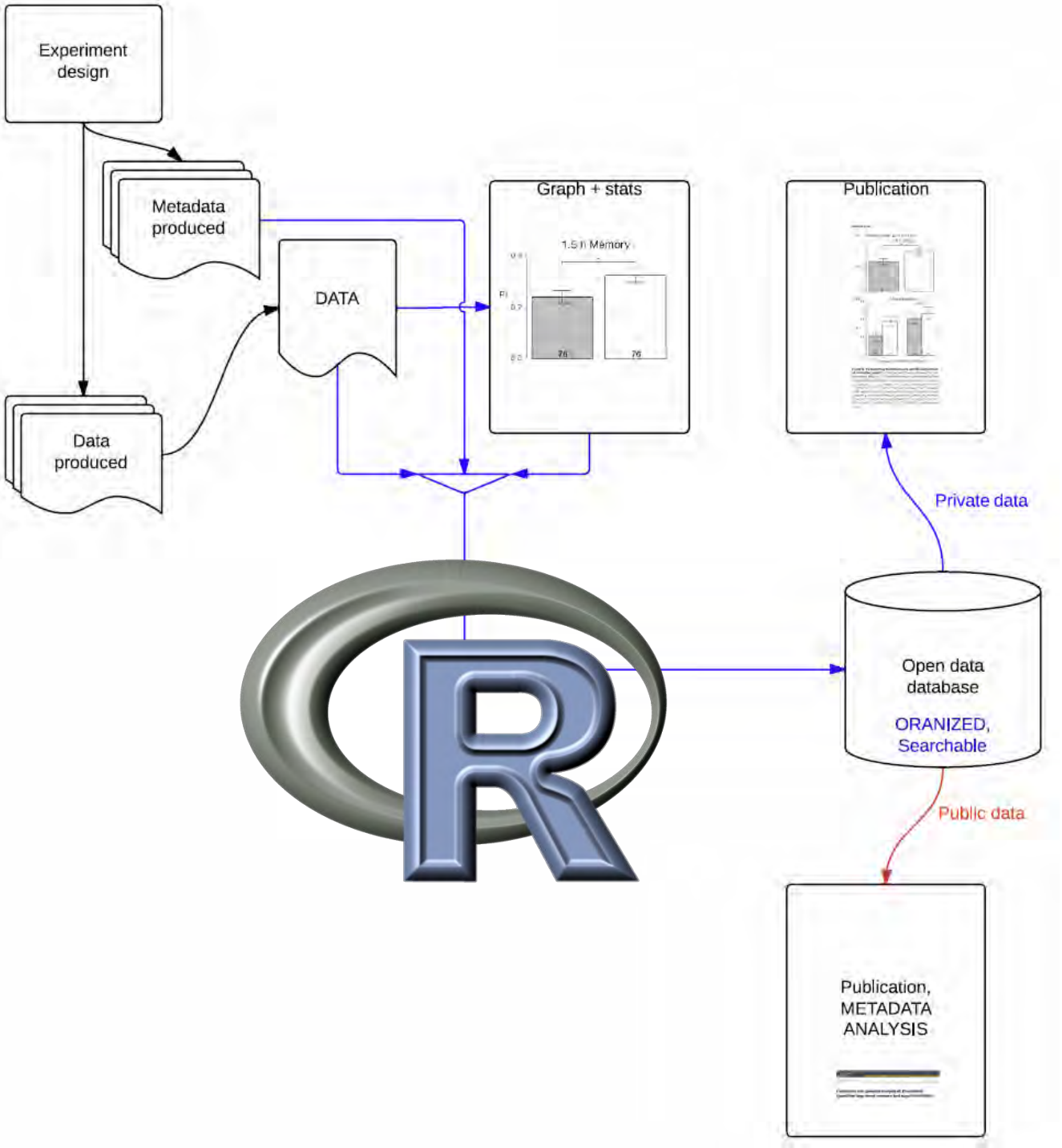
Abstract Top

Background

Insects have been among the most widely used model systems for studying the control of locomotion by nervous systems. In *Drosophila*, we implemented a simple test for locomotion: in Buridan's paradigm, flies walk back and forth between two inaccessible visual targets [1]. Until today, the lack of easily accessible tools for tracking the fly position and analyzing its trajectory has probably contributed to the slow acceptance of Buridan's paradigm.


Experiment design
Metadata produced
Data produced
DATA
Graph + stats
1.5 h Memory
Publication
???
Open data database


Experiment design
Metadata produced
Data produced
DATA
Graph + stats
1.5 h Memory
Publication
Private data
Open data database
ORANIZED, Searchable
Public data
Publication, METADATA ANALYSIS


Experiment design
Metadata produced
DATA
Data produced
Graph + stats
Publication
Private data
Open data database
ORANIZED, Searchable
Public data
Publication, METADATA ANALYSIS

figshare My data Browse Upload B. Brembs

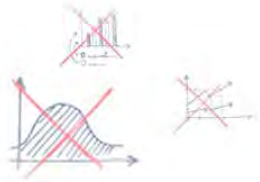
Features

1GB of private space

taggable and easily filtered, your research data is better managed and easy to locate

Unlimited public space

upload to your heart's content
the more - the better



Publish negative data

all published research is citable

Upload all formats

all research outputs welcomed – images, graphs, videos, datasets

Quick & simple upload

upload to your heart's content
the more - the better

Cloud based

Secure and accessible from anywhere

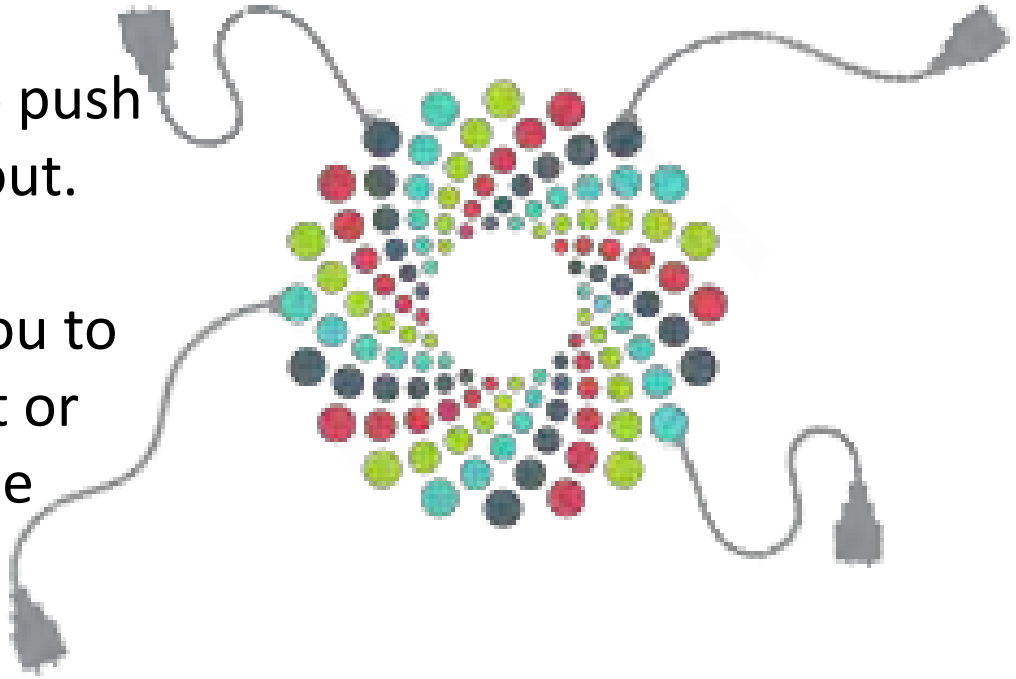
API

Desktop uploader

Collaborative spaces

FigShare API

The fig**share** API allows you to push data to fig**share**, or pull data out. This first version is a basic implementation that allows you to manage your fig**share** account or build applications on top of the fig**share** platform and public research.



rfigshare

Programmatic interface to Figshare.com

Installing Stable version available

Development Version | API Keys

```
install.packages('rfigshare')
# If you would like to install a development version:
library(devtools)
install_github("rfigshare", "ropensci")
```

The dev version of rfigshare has newer functions currently in development. Some of these may not be stable.

View this project on github

Quick start guide

```
library("rfigshare")
```

For a full list of functions and a web manual, visit the package repository on GitHub.

Tutorials

Tutorials coming shortly.

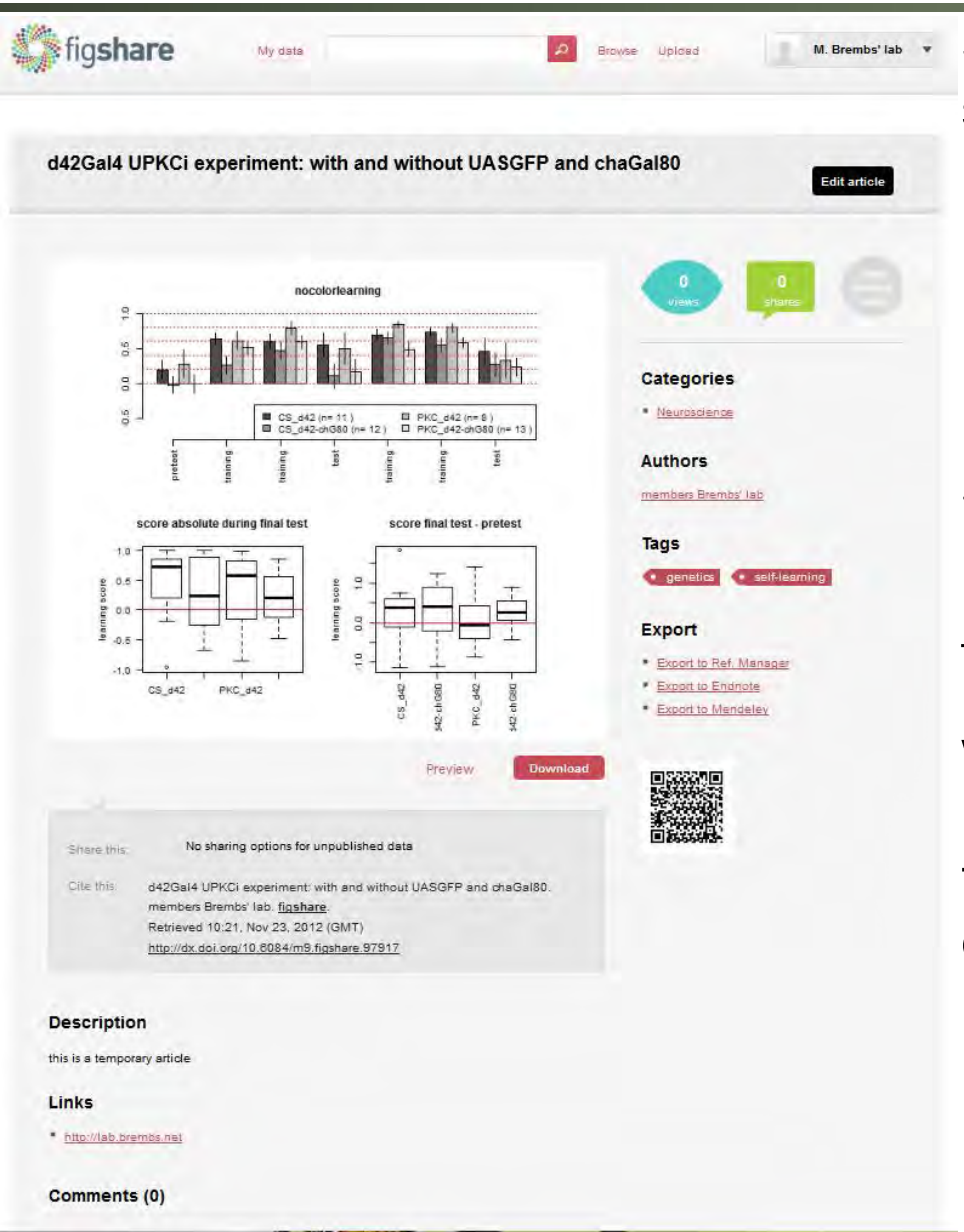
Use cases & resources

If you have ideas for use-cases or have written about this package anywhere, please drop us a line.

Add new, or update an existing article

```
55  #brembs lab account
56  options(FigshareKey = "A                    g")
57  options(FigsharePrivateKey = "C                    GA")
58  options(FigshareToken = "J                                                    pQ")
59  options(FigsharePrivateToken = "C                    A")
60  ###end figshare info
61
62  require(rfigshare)
63  fs_auth()
64
65  ##need to create the article and get its id here: do it only once, then write the id and comment this part:
66
67  if (is.na(id_test)){
68  #   article_title= "d42Gal4 UPKCi experiment: with and without UASGFP and chaGal80"
69  #   article_description = "this is a temporary article"
70  #   article_type =  "figure"   #, "dataset" #,"media", "poster", "paper", "fileset"
71  #   article_tags = c("self-learning","genetics")
72  #   article_categories="Neuroscience"
73  #   article_files = "T:dataforfigshare.png"
74  #   article_visibility=   "draft" #"private" "public" #
75  #   article_authors= c("julien colomb")
76  #   article_links="http://lab.brembs.net"
77
78
79    id <- fs_new_article(title = article_title, description = article_description,
80                         type = article_type, tags = article_tags, categories=article_categories ,
81                         files = article_files, visibility= article_visibility, #authors = article_authors,
82                         links=article_links)
83    ##add björn as author (the "ö" leads to error on figshare at this time):
84    rfigshare:::fs_add_author(article_id = id_test, author_id = 96464)
85
86    id
87  }else{
88    newfile= "T:dataforfigshare.png"
89    fs_upload(id_test, file =newfile)
90  }
91
```

Run your script and...



Same type of experiments → same script

Default: → same categories

→ same tags

→ same authors

→ same links

→ same description

→ One complete article, in one click.

<u>Update the figure</u>:

Higher sample size directly published while analysed, your boss may see the results before you do! (or you may see the results of your student before they do)

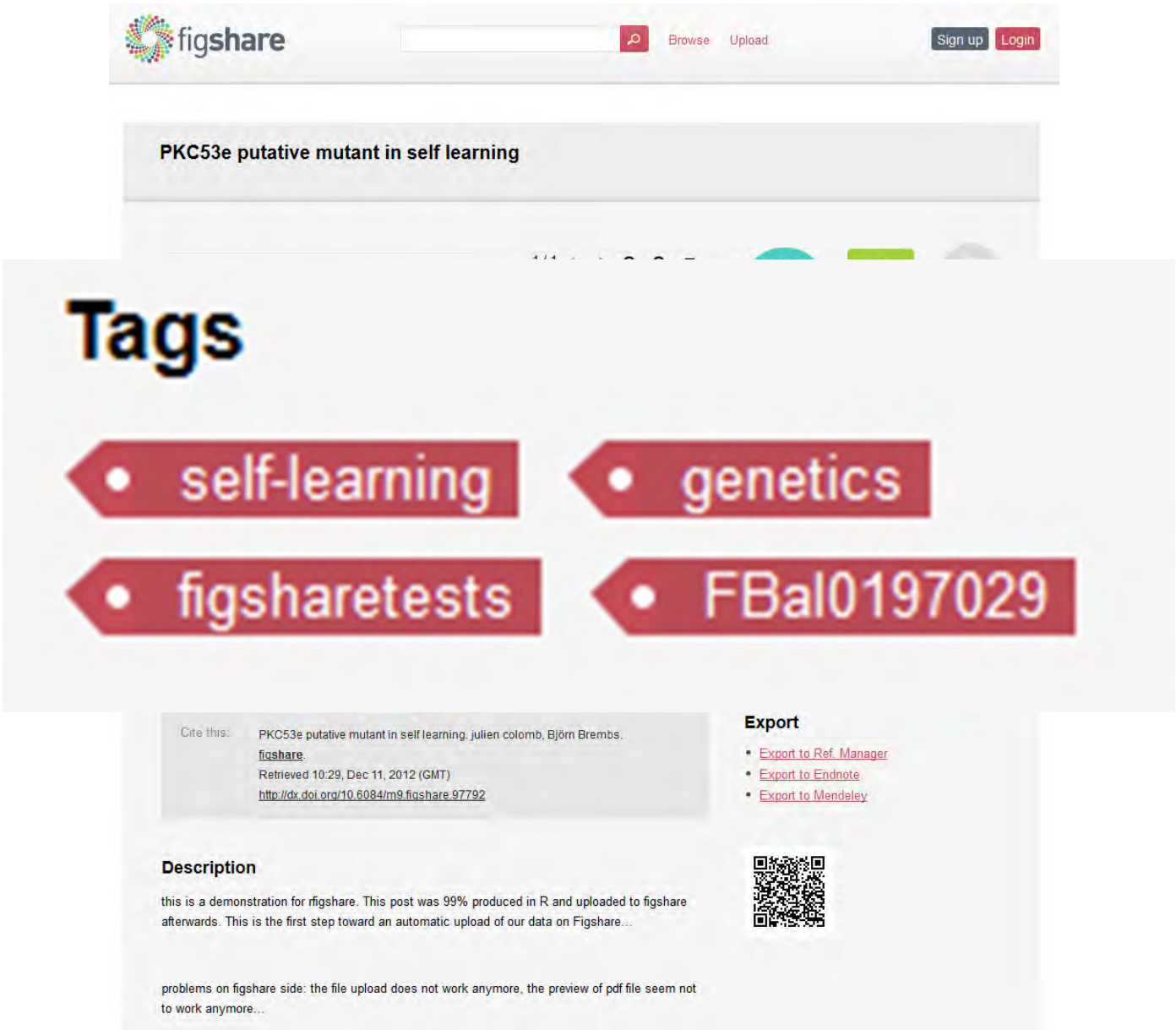
Possibility to make it public and citable in one click or directly in the R code.

Citable?

Helping you to find,
access, and reuse data

http://dx.doi.org/10.6084/m9.figshare.97792

Citable!


figshare
Browse
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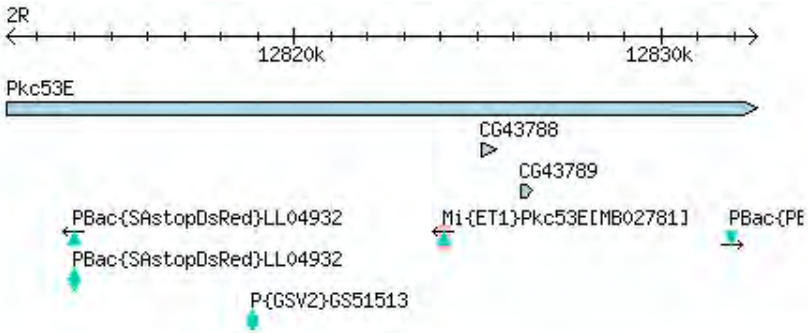
Sign up
Login
PKC53e putative mutant in self learning
Tags
self-learning
genetics
figsharetests
FBal0197029
Cite this:
PKC53e putative mutant in self learning. julien colomb, Björn Brembs.
figshare.
Retrieved 10:29, Dec 11, 2012 (GMT)
http://dx.doi.org/10.6084/m9.figshare.97792
Export
Export to Ref. Manager
Export to Endnote
Export to Mendeley
Description
this is a demonstration for rfigshare. This post was 99% produced in R and uploaded to figshare afterwards. This is the first step toward an automatic upload of our data on Figshare...
problems on figshare side: the file upload does not work anymore, the preview of pdf file seem not to work anymore...

FlyBase

Allele Dmel\Pkc53E^{MB02781}

General Information			
Symbol	Dmel\Pkc53E^{MB02781}	Species	*D. melanogaster*
Name		FlyBase ID	FBal0197029
Feature type	allele	Associated gene	Dmel\Pkc53E

Map (GBrowse)



Allele class	
Mutagen	

- Recent Updates
- Nature of the Allele
- Phenotypic Data
- Interactions
- Complementation & Rescue Data
- Stocks (1)
- Notes on Origin
- External Crossreferences & Linkouts
- Synonyms & Secondary IDs (1)
- References (1)