

Forschungsdaten-Repositoryen

Stand und Perspektive

Heinz Pampel, Deutsches GeoForschungsZentrum GFZ

5. Kongress Bibliothek & Information Deutschland, Leipzig, 11.03.2013

Agenda

- Hintergrund
- Forschungsdaten-Repositoryen
- „Intelligent Openness“
- Herausforderungen

Agenda

- **Hintergrund**
- Forschungsdaten-Repositoryen
- „Intelligent Openness“
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Zugangsbarrieren

- „The overwhelming majority of respondents (87 %) either disagree or disagree strongly with the statement that ‘there is NO access problem to research data’. Just 6 % of respondents have no opinion, another 6 % agree with the statement and only 1 % agree strongly.“

European Commission. (2012). Online survey on scientific information in the digital age. Luxembourg: Publications Office of the European Union. Retrieved from http://ec.europa.eu/research/science-society/document_library/pdf_06/survey-on-scientific-information-digital-age_en.pdf

Zugangsbarrieren

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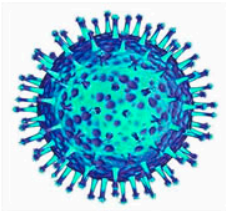
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Tamiflu campaign

The *BMJ's* **open data campaign** aims to achieve appropriate and necessary independent scrutiny of data from clinical trials. Working with others, we seek to highlight the problems caused by lack of access to data, and we welcome any suggestions on how to take things further.



The Tamiflu story

Our first open data campaign initiative relates to a public promise Roche made in 2009 to release full clinical trial reports in response to an investigation by the *BMJ* and Cochrane collaborators Peter Doshi and Tom Jefferson. [1][2][3][4]


The bottom line:

- WHO recommends Tamiflu, but has not vetted the Tamiflu data.
- EMA approved Tamiflu, but did not review the full Tamiflu dataset.
- CDC and ECDC encourage the use and stockpiling of Tamiflu, but did not vet the Tamiflu data.
- The majority of Roche's Phase III treatment trials remain unpublished over a decade after completion.
- In Dec 2009, Roche publicly promised independent scientists access to "full study reports" for selected Tamiflu trials, but to date the company has not made even one full report available.

Releasing the trial reports would allow independent academics to answer questions about this globally stockpiled drug. To date, the full data set has not been provided.

This page links to others listing open correspondence with Roche, and the various bodies around the world which licence or recommend drugs. This open correspondence of letters offers readers the chance to witness attempts to compel greater accountability and responsibility in public health decision making and policy. The *BMJ* plans to launch other campaigns linked to its investigations in the future. Find out more about the background to Tamiflu and open data by reading [this feature](#) and accompanying [editorial](#).

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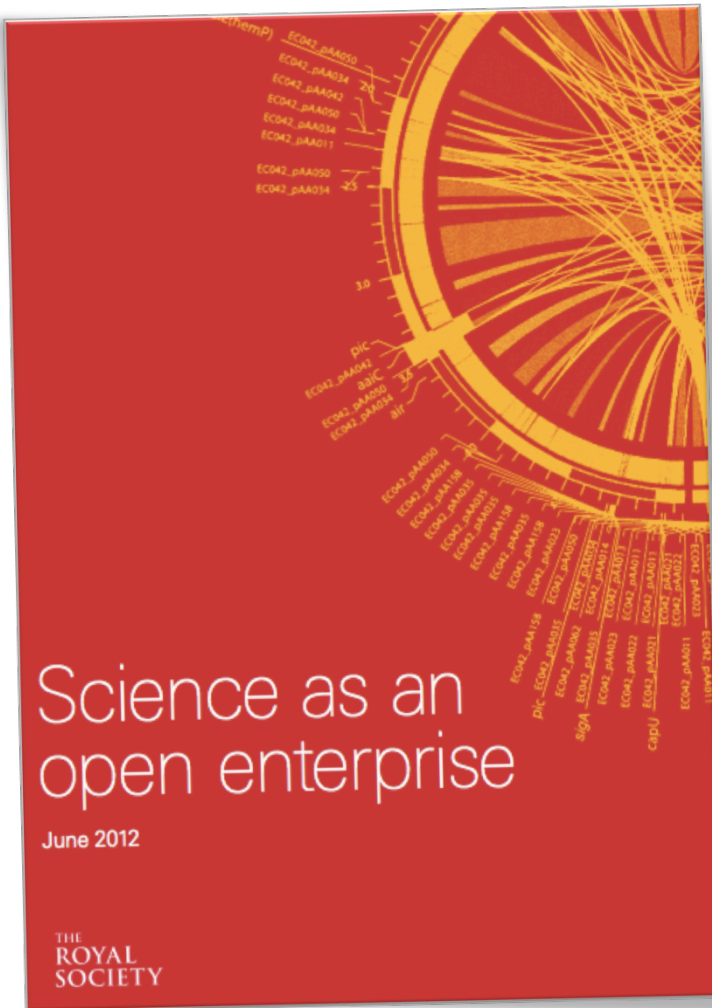
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Use of dietary linoleic acid for secondary prevention of coronary heart disease and death: evaluation of recovered data from the Sydney Diet Heart Study and updated meta-analysis (29412 views)

Long term calcium intake and rates of all cause and cardiovascular mortality: community based

Payne, D. (2012). Tamiflu: the battle for secret drug data. *BMJ*, 345(oct29 2), e7303–e7303. doi:10.1136/bmj.e7303

The Royal Society



„Where data justify it, scientists should make them available in an appropriate data repository.“

The Royal Society. (2012). Science as an open enterprise. The Royal Society Science Policy Centre report 02/12. Retrieved from http://royalsociety.org/uploadedFiles/Royal_Society_Content/policy/projects/sape/2012-06-20-SAOE.pdf

US-Directive

„digitally formatted scientific data resulting from unclassified research supported wholly or in part by Federal funding should be stored and publicly accessible to search, retrieve, and analyze.“

EXECUTIVE OFFICE OF THE PRESIDENT
OFFICE OF SCIENCE AND TECHNOLOGY POLICY
WASHINGTON, D.C. 20502

February 22, 2013

MEMORANDUM FOR THE HEADS OF EXECUTIVE DEPARTMENTS AND AGENCIES

FROM: John P. Holdren 
Director

SUBJECT: Increasing Access to the Results of Federally Funded Scientific Research

I. Policy Principles

The Administration is committed to ensuring that, to the greatest extent and with the fewest constraints possible and consistent with law and the objectives set out below, the direct results of federally funded scientific research are made available to and useful for the public, industry, and the scientific community. Such results include peer-reviewed publications and digital data.

Scientific research supported by the Federal Government catalyzes innovative breakthroughs that drive our economy. The results of that research become the grist for new insights and are assets for progress in areas such as health, energy, the environment, agriculture, and national security.

Access to digital data sets resulting from federally funded research allows companies to focus resources and efforts on understanding and exploiting discoveries. For example, open weather data underpins the forecasting industry, and making genome sequences publicly available has spawned many biotechnology innovations. In addition, wider availability of peer-reviewed publications and scientific data in digital formats will create innovative economic markets for services related to curation, preservation, analysis, and visualization. Policies that mobilize these publications and data for re-use through preservation and broader public access also maximize the impact and accountability of the Federal research investment. These policies will accelerate scientific breakthroughs and innovation, promote entrepreneurship, and enhance economic growth and job creation.

The Administration also recognizes that publishers provide valuable services, including the coordination of peer review, that are essential for ensuring the high quality and integrity of many scholarly publications. It is critical that these services continue to be made available. It is also important that Federal policy not adversely affect opportunities for researchers who are not funded by the Federal Government to disseminate any analysis or results of their research.

To achieve the Administration's commitment to increase access to federally funded published research and digital scientific data, Federal agencies investing in research and development must have clear and coordinated policies for increasing such access.

Office of Science and Technology Policy. (2013). Increasing Access to the Results of Federally Funded Scientific Research. Retrieved from http://www.whitehouse.gov/sites/default/files/microsites/ostp/ostp_public_access_memo_2013.pdf

EC-Empfehlung



„Ensure that, as a result of these policies: research data that result from publicly funded research become publicly accessible, usable and re-usable through digital e-infrastructures“

European Commission. (2012). Commission Recommendation on access to and preservation of scientific information. C(2012) 4890 final. Retrieved from http://ec.europa.eu/research/science-society/document_library/pdf_06/recommendation-access-and-preservation-scientific-information_en.pdf

Data Policies: Förderorganisationen

- **NIH, 2003**
 - „The NIH endorses the sharing of final research data to serve these and other important scientific goals. The NIH expects and supports the timely release and sharing of final research data from NIH-supported studies for use by other researchers. Starting with the October 1, 2003 receipt date, investigators submitting an NIH application seeking \$500,000 or more in direct costs in any single year are expected to include a plan for data sharing or state why data sharing is not possible.“
- **DFG, 2012**
 - „Wenn aus Projektmitteln systematisch (Mess-)Daten erhoben werden, die für die Nachnutzung geeignet sind, legen Sie bitte dar, welche Maßnahmen ergriffen wurden bzw. während der Laufzeit des Projektes getroffen werden, um die Daten nachhaltig zu sichern und ggf. für eine erneute Nutzung bereit zu stellen. Bitte berücksichtigen Sie dabei auch - sofern vorhanden - die in Ihrer Fachdisziplin existierenden Standards und die Angebote bestehender Datenrepositorien.“

Data Policies: Journals

- **Nature, 2011**
 - „Data sets must be made freely available to readers from the date of publication, and must be provided to editors and peer-reviewers at submission, for the purposes of evaluating the manuscript. For the following types of data set, submission to a community-endorsed, public repository is mandatory. Accession numbers must be provided in the paper. Examples of appropriate public repositories are listed below.“
- **AGU, 1996**
 - „Data sets cited in AGU publications must meet the same type of standards for public access and long-term availability as are applied to citations to the scientific literature. Thus data cited in AGU publications must be permanently archived in a data center or centers that meet the following conditions: a) are open to scientists throughout the world. b) are committed to archiving data sets indefinitely. c) provide services at reasonable costs.“

Zurückhaltung in der Wissenschaft

- Campbell, E. G., Clarridge, B. R., Gokhale, M., Birenbaum, L., Hilgartner, S., Holtzman, N.A., & Blumenthal, D. (2002). Data Withholding in Academic Genetics. Evidence From a National Survey. *JAMA: The Journal of the American Medical Association*, 287(4), 473–480. doi:10.1001/jama.287.4.473
- Kuipers, T., & Van der Hoeven, J. (2009). Insight into digital preservation of research output in Europe. Survey Report. Retrieved from http://www.parse-insight.eu/downloads/PARSE-Insight_D3-4_SurveyReport_final_hq.pdf
- Schäfer, A., Pampel, H., Pfeiffenberger, H., Dallmeier-Tiessen, S., Tissari, S., Darby, R., Giaretta, K., et al. (2011). Baseline Report on Drivers and Barriers in Data Sharing. Retrieved from http://www.alliancepermanentaccess.org/wp-content/uploads/downloads/2011/11/ODE-WP3-DEL-0002-1_0_public_final.pdf
- Tenopir, C., Allard, S., Douglass, K., Aydinoglu, A. U., Wu, L., Read, E., Manoff, M., et al. (2011). Data Sharing by Scientists: Practices and Perceptions. *PLoS ONE*, 6(6), e21101. doi:10.1371/journal.pone.0021101
- Wicherts, J. M., Borsboom, D., Kats, J., & Molenaar, D. (2006). The poor availability of psychological research data for reanalysis. *American Psychologist*, 61(7), 726–728. doi:10.1037/0003-066X.61.7.726


Potenzial für die Wissenschaft

BMJ

BMJ 2013;346:e8707 doi: 10.1136/bmj.e8707 (Published 5 February 2013) Page 1 of 18

RESEARCH

Use of dietary linoleic acid for secondary prevention of coronary heart disease and death: evaluation of recovered data from the Sydney Diet Heart Study and updated meta-analysis

 OPEN ACCESS

Christopher E Ramsden *clinical investigator*^{1,2}, Daisy Zamora *epidemiologist*², Boonseng Leelarthaepin *retired, original study investigator*³, Sharon F Majchrzak-Hong *research chemist*¹, Keturah R Faurot *epidemiology doctoral candidate*², Chirayath M Suchindran *senior biostatistician*⁴, Amit Ringel *guest researcher*¹, John M Davis *professor*⁵, Joseph R Hibbeln *senior clinical investigator*¹

¹Laboratory of Membrane Biophysics and Biochemistry, National Institute on Alcohol Abuse and Alcoholism, National Institutes of Health, Bethesda, MD 20892, USA; ²Department of Physical Medicine and Rehabilitation, School of Medicine, University of North Carolina at Chapel Hill, Chapel Hill, NC, USA; ³University of New South Wales, Sydney, Australia; ⁴Department of Biostatistics, School of Public Health, University of North Carolina at Chapel Hill, Chapel Hill, USA; ⁵Department of Psychiatry, University of Illinois at Chicago, Chicago, IL, USA

Abstract

Objective To evaluate the effectiveness of replacing dietary saturated fat with omega 6 linoleic acid, for the secondary prevention of coronary heart disease and death.

Design Evaluation of recovered data from the Sydney Diet Heart Study, a single blinded, parallel group, randomized controlled trial conducted in 1966-73, and an updated meta-analysis including those previously

v 11.0%, 1.70 (1.03 to 2.80), P=0.04; coronary heart disease 16.3% v 10.1%, 1.74 (1.04 to 2.92), P=0.04). Inclusion of these recovered data in an updated meta-analysis of linoleic acid intervention trials showed non-significant trends toward increased risks of death from coronary heart disease (hazard ratio 1.33 (0.99 to 1.79); P=0.06) and cardiovascular disease (1.27 (0.98 to 1.65); P=0.07).

Conclusions Advice to substitute polyunsaturated fats for saturated

Ramsden, C. E., Zamora, D., Leelarthaepin, B., Majchrzak-Hong, S. F., Faurot, K. R., Suchindran, C. M., Ringel, A., et al. (2013). Use of dietary linoleic acid for secondary prevention of coronary heart disease and death: evaluation of recovered data from the Sydney Diet Heart Study and updated meta-analysis. *BMJ*, 346(feb04 3), e8707–e8707. doi:10.1136/bmj.e8707

Barrieren überwinden

ODE has learned that there are some conditions that can enable data sharing. Service providers like data centres and libraries for example are ready to play a certain role or expand their activities in data management and sharing. Publishers see the added value of data published alongside articles and foresee an adaption of their editorial policies or establish data journals. Researchers and funders view data as a research output in its own right and funding bodies require more and more data management plans specifying data preservation and access. A series of enablers can spread existing best practices, which thrive on collaborations within and across the individual groups. Successful data sharing needs to profit from synergies that arise from such collaborations where every stakeholder group contributes with its expertise, skills and experiences.

Dallmeier-Tiessen, S., Darby, R., Gitmans, K., Herterich, P., Lambert, S., Mele, S., Nordling, J., et al. (2012). Summary of the studies, thematic publications and recommendations. Retrieved from <http://www.alliancepermanentaccess.org/wp-content/plugins/download-monitor/download.php?id=Summary+of+the+studies%2C+thematic+publications+and+recommendations>

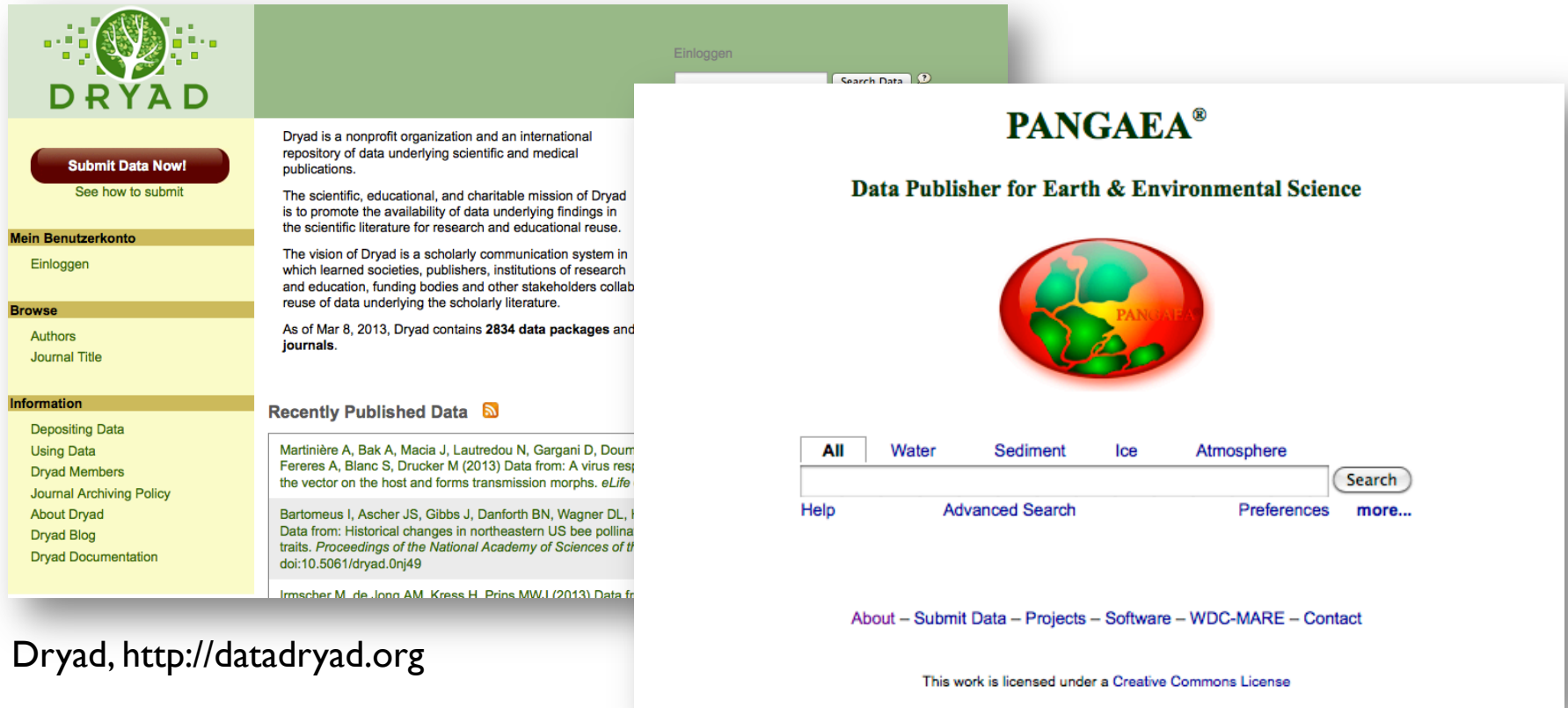
Agenda

- Hintergrund
- **Forschungsdaten-Repositoryen**
- „Intelligent Openness“
- Herausforderungen

Definition

- Die Landschaft der Forschungsdaten-Repositoryn ist äußerst heterogen.
- Es gibt deutliche Unterschiede zur Landschaft der Text-Repositoryn, die durch die Open Archives Initiative (OAI) geprägt ist.
- Forschungsdaten-Repositoryn sind häufig durch Fach-Communities und deren Infrastrukturanbieter geprägt.
- Ein Forschungsdaten-Repository ist eine Infrastruktur, die das Ziel verfolgt, Forschungsdaten möglichst dauerhaft zugänglich zu machen.
- Ausrichtung und Services variieren stark.

Disziplinäre Daten-Repositoryen



The image shows two overlapping website screenshots. The background screenshot is the Dryad website, featuring a green and white color scheme with a tree logo. It includes a 'Submit Data Now!' button, a navigation menu with sections like 'Mein Benutzerkonto', 'Browse', and 'Information', and a main content area with text about Dryad's mission and a 'Recently Published Data' section. The foreground screenshot is the PANGAEA website, which has a white background with a red and green globe logo. It displays the title 'PANGAEA® Data Publisher for Earth & Environmental Science', a search bar with filters for 'All', 'Water', 'Sediment', 'Ice', and 'Atmosphere', and a footer with navigation links and a Creative Commons license notice.

Dryad, <http://datadryad.org>

PANGAEA, <http://www.pangaea.de>

Projektbezogene Daten-Repositoryen

Scientific Drilling Database

Data from Deep Earth Sampling and Monitoring

- + Home
- + About SDDB
- + News
- + Data Publications
- + Catalogue
 - + Authors
 - + Dataset
 - + Research Programs
 - + Sampling Gear
 - + Analytical Parameters
- + Publication Process
- + Admin

GFZ **icdp**
POTSDAM

Dataset Description

Citation: Demory, Francois; Nowaczyk, Norbert; Witt, An Interrelation of down-core variations of the high-resolution magnetic susceptibility for COND1-603 and COND1-605. *Scientific Drilling* /GFZ.SDDB.1003
[Download Citation \(EndNote\)](#)

Title: Interrelation of down-core variations of the high-resolution magnetic susceptibility for COND1-603 and COND1-605

Abstract: Down-core variations of the high-resolution magnetic susceptibility have been obtained for kasten and pilot cores from site 14C. The interrelation of AMS 14C dating performed on kasten cores to the pilot cores subjected to the same sampling protocol and discrepancies in the magnetic susceptibility curves (COND1-603 and COND1-605) measured in 2001 and 2002 are discussed. Large peaks visible in the first measurement from site 14C after a 2-year-long storage. This is a first hint for chemically unstable greigite.
[Show in Google Earth](#)

Related Publications:

- N. Fagel, L.Y. Alleman, L. Granina, F. H. André, Vivianite formation and distribution. *Planet. Change* 46 (2005), pp. 315-336. doi:10.1016/j.pce.2005.05.001

The Bern Digital Pantheon Project

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Repository

first previous Record 198 of 776 next last



The Bern Digital Pantheon Project: Transverse cross-section, facing north

The Bern Digital Pantheon Project: Transverse cross-section, facing north. In: Gerd Graßhoff, Markus Wäfler, Jon Albers and Christian Berndt (ed.): Digital Repository of the Bern Digital Pantheon Project. Bern 2009, BDPP0019 (Published online at: <http://www.digitalpantheon.ch/BDPP0019>).

BibTeX:

```
@other(BDPP0019,
author = (The Bern Digital Pantheon Project),
title = (Transverse cross-section, facing north),
year = (2009),
keywords = (Medium Visualisation Building Interior),
owner = (berndt),
timestamp = (2009.05.28),
editor = (Graßhoff, Gerd and Wäfler, Markus and Albers, Jon and Berndt, Christian),
address = (Bern),
repository = (Digital Repository of the Bern Digital Pantheon Project)
}
```

Usage of the repository

SDDB, <http://www.scientificdrilling.org>

BDPP, <http://www.digitalpantheon.ch>

Institutionelle Daten-Repositoryen

The screenshot shows the top navigation bar of the Purdue University Research Repository (PURR). It features the Purdue University logo on the left, followed by the text "Purdue University Research Repository | PURR". On the right, there are links for "Login", "Register", and "Report a bug". Below this, a secondary navigation bar includes "Home", "Browse Content", "Projects", "Get Started", and "Contact Us", along with a search input field.

This screenshot shows a dataset page on PURR titled "Phosphorus and Potassium Influence on Alfalfa Nutrition" by Jeffrey J Volenec. The page includes a "Download (XLS)" button, a version history section (Version 1.0 published on Feb 22, 2010), and an abstract. The abstract describes a master file of merged Excel files with data from several studies on the influence of phosphorus and potassium nutrition on alfalfa. A navigation menu at the bottom includes "About", "Supporting Docs", "Versions", "Reviews", "Questions", and "Wish List".

The screenshot shows the header of the Open Data LMU website. It features logos for LMU (Ludwig-Maximilians-Universität München) and the Universitätsbibliothek. A search bar is present, along with navigation links for "Home", "Browse", "Erweiterte Suche", and "Hilfe". The language is set to "English", and there are links for "Anmelden" and "Registrieren".

This screenshot shows a dataset page on Open Data LMU. It includes a "Zitation" section with a citation for a supplementary file. Below this, there is a download link for "Anderes (ZIP-file)" (232Mb) and a DOI link: <http://dx.doi.org/10.5282/ubm/data.39>.

This screenshot shows the "Beschreibung" (Description) section of a dataset page on Open Data LMU. It contains a detailed paragraph describing the zip-file contents, which include normalized data sets and R-codes for reproducing analyses from a paper by Boulesteix, Guillemot & Sauerbrei (2011). The text lists various publications where the data has been used, such as BMC Bioinformatics, Nature, and Breast Cancer Research.

PURR, <http://research.hub.purdue.edu>

Open Data LMU, <http://data.ub.uni-muenchen.de>

Generische Daten-Repositorien

The screenshot shows a Figshare page for a dataset titled "Herring Hepatic Transcriptome 34300 contigs.fa". The page features a search bar, user profile "H. Pampel", and navigation links "Browse" and "Upload". The dataset is displayed with a text preview of sequence data, including average coverage values (2.00, 1.64, 3.34) for three contigs. To the right, statistics show 3677 views, 7 shares, and a "cites coming soon" badge. Metadata includes the publication date (19 Jan 2012) and file size (22.40 MB). The page lists categories "Molecular biology" and "Marine Biology", author "Steven Roberts", and tags "contigs", "herring", "fasta", and "ngs". An "Export to Ref. Manager" option is also present. A sharing section at the bottom left includes social media links and a citation string.

Herring Hepatic Transcriptome 34300 contigs.fa

```
>ConsensusfromContig1 Average coverage: 2.00
GTGTGTGTGTGCGGTGTGCTCTACGCCCTCGTCCTTCACTGTACTCGCTGTCAGTGTCT
CGACCGGGGTGCTCAGGCATCTTGGGGTGTGCTCCTCTTGGGGTTCAGCCTGGACGAGC
TTGGGGGCTGCTGATTGGATGGCTGTGGCGCTGGGCTCTTCCATTGGTTCCTGGCCC
TCAGGGTCCGCCCTTCTGGGGCTTGGCGGGAGGCTCAGTCTCTGCAGCTGCGTCTGCC
TCTGGCTCAGGCTCGGCCTCCGGCTTACTGTTGCTCCCGCACTGACGAGGAGGAGGG
AGCAACTGCTGCTGCTGCTTTTGGCTGTTGGCTCTGCTGCATCATGTGCATGTACATGTTG
TACACCAGGTTGGCCATTTCCGGCATGTTCTTGATCGCCTGGTTGGGCTGGGACGAGCGA
TCTCCAAATAGGCTGGGTGTAGTACTCATTAGTCCGTATGTGTAGCTGCATAGGGCGCGC
GTGAGC
>ConsensusfromContig2 Average coverage: 1.64
TCGAGGAGCTGACCGGCATGGCTCCTGCAGAAGCAGCGACTGGTCGAGACCCTGCGCCTG
CAGCTCGAGATCGGGCAGCAAGCAGCGCGCGGCACGATGACGACGACGGCGGGGGCC
AAGGAGACCTTCCAGCAGCCACCGCCAGAGGGCGCTGTTGTGGGGTGAAGGAGGAGCC
CCGACGTCTACCGCCGACGCCATCCACTGCTGCTCTCTCCCGCCGCTGGAGGCCATC
CGCGTACCCTGAAAAGAGGAAGCGACCGAGGAAGAGGAGGAGGAGGAGGAGAGAGAG
GAGATGGACGACGTGATGGCGGAGACGAACGACTGCGATGTCGG
>ConsensusfromContig3 Average coverage: 3.34
CTGGCTATCAGGTTAAAATTCCAGGCATCACTGTTTCAATTTGGGCTTGTCCAGTTTGTCT
TTTAGTCTGTTCCAGTTCAGCCTTCATTTGAGGAAAATTAAGTTGATGGCAGGTCGAC
```

3677 views, 7 shares, cites coming soon

Published on 19 Jan 2012 - 16:37 (GMT)
Filesize is 22.40 MB

Categories

- Molecular biology
- Marine Biology

Authors

Steven Roberts

Tags

- contigs
- herring
- fasta
- ngs

Export

- Export to Ref. Manager

Share this: [f Share](#) 0 [Tweet](#) 6 [+1](#) 1

Cite this: Herring Hepatic Transcriptome 34300 contigs.fa. Steven Roberts. Figshare. Retrieved 10:28, May 11, 2012 (GMT) hdl.handle.net/10779/084d34370fda29bbc67b3c5ecb02575

Preview Download

Figshare, <http://figshare.com>

Blick in die Biomedizin

Published online 30 November 2012
Nucleic Acids Research, 2013, Vol. 41, Database issue DI-D7
doi:10.1093/nar/gks1297

The 2013 Nucleic Acids Research Database Issue and the online Molecular Biology Database Collection

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Received November 14, 2012; Accepted November 15, 2012

ABSTRACT

The 20th annual Database Issue of *Nucleic Acids Research* includes 176 articles, half of which describe new online molecular biology databases and the other half provide updates on the databases previously featured in *NAR* and other journals. This year's highlights include two databases of DNA repeat elements; several databases of transcriptional factors and transcriptional factor-binding sites; databases on various aspects of protein structure and protein-protein interactions; databases for metagenomic and rRNA sequence analysis; and four databases specifically dedicated to *Escherichia coli*. The increased emphasis on using the genome data to improve human health is reflected in the development of the databases of genomic structural variation (NCBI's dbVar and EB1's DGVA), the NIH Genetic Testing Registry and several other databases centered on the genetic basis of human disease, potential drugs, their targets and the mechanisms of protein-ligand binding. Two new databases present genomic and RNAseq data for monkeys, providing wealth of data on our closest relatives for comparative genomics purposes. The *NAR* online Molecular Biology Database Collection, available at <http://www.oxfordjournals.org/nar/database/a/>, has been updated and currently lists 1512 online databases. The full content of the Database Issue is freely available online on the *Nucleic Acids Research* website (<http://nar.oxfordjournals.org/>).

NEW AND UPDATED DATABASES

This 1300-page virtual volume represents the 20th annual Database Issue of *Nucleic Acids Research* (*NAR*). It includes descriptions of 88 new online databases, 77 update articles on databases that have been previously featured in the *NAR* Database Issue (Table 1) and 11 articles with updates on database resources whose descriptions have been previously published in other journals (Table 2).

At this point it might be instructive to look back at the origin and evolution of the *NAR* Database Issue. Its history started from two supplementary issues that were published in *NAR* in April of 1991 and in May of 1992 and consisted of 18 and 19 articles, respectively (see <http://nar.oxfordjournals.org/content/19/supplement.toc> and <http://nar.oxfordjournals.org/content/20/supplement.toc>). These articles offered descriptions of several nucleotide sequence databases, such as GenBank, the EMBL Data Library, compilations of small RNA, tRNA, and 5S, 16S, and 23S rRNA sequences (including the Ribosomal Database Project), DNA sequences from *Escherichia coli* and a human genome database (GDB). Those first issues also included descriptions of several protein databases, such as SWISS-PROT, PIR, PROSITE, Restriction Enzyme Database (REBASE), Transcription Factors Database (TFD) and Histone database. There was also a medical genetics database, Haemophilia B, listing point mutations and indels in the coagulation factor IX (*F9*) gene that caused this blood clotting disorder, which has affected the royal families of several European countries.

The next issue, published on July 1, 1993, was the first one formally labelled as the Database Issue. It consisted of 24 articles, which added databases of RNA and protein structure and the ENZYME database. It was followed by

Downloaded from <http://nar.oxfordjournals.org/> at Geforschungszentrum Potsdam on March 6, 2013

OXFORD JOURNALS CONTACT US

Nucleic Acids Research

ABOUT THIS JOURNAL CONTACT THIS JOURNAL SUBSCRIPTIONS CURRENT ISSUE ARCHIVE SEARCH

Oxford Journals > Life Sciences > Nucleic Acids Research > Database Summary Paper Alpha List

2013 NAR Database Summary Paper Alphabetic List

1 2 3 4 5 A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

- ▶ [Compilation Paper](#)
- ▶ [Category List](#)
- ▶ [Alphabetical List](#)
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16S and 23S Ribosomal RNA Mutation Database Triman K.L.
16S and 23S ribosomal RNA mutations
[database](#) [summary](#)

2D-PAGE Pleissner, K.-P., Eifert, T., Buettner, S., Knipper, J., Schmelzer, P., Stein, R., Schmid, F., Mattow, J., Zimny-Arndt, U., Schmid, M., Jungblut, P.R.
Proteome database system for microbial research
[database](#) [summary](#)

2P2Idb Basse, M.J., Betzi, S., Bourgeas, R., Bouzidi, S., Chetrit, B., Hamon, V., Morelli, X., and Roche, P.
2P2Idb - database dedicated to the modulation of protein-protein interactions
[database](#) [summary](#)

3D rRNA modification maps
Locations of modified rRNA nucleotides within the 3D structure of the ribosome
[database](#) [summary](#)

3D-Footprint Bruno Contreras-Moreira
Estimates of DNA-binding specificity for protein-DNA complexes in PDB
[database](#) [summary](#)

3D-Genomics
Structural annotations for complete proteomes
[database](#) [summary](#)

3D-Interologs
Protein-protein interactions in various evolutionary lineages
[database](#) [summary](#)

3DID - 3D interacting domains
Domain-domain interactions in proteins with known 3D structures
[database](#) [summary](#)

Fernández-Suárez, X. M., & Galperin, M.Y. (2013). The 2013 Nucleic Acids Research Database Issue and the online molecular biology database collection. *Nucleic Acids Research*, 41(Database issue), DI-7. doi:10.1093/nar/gks1297

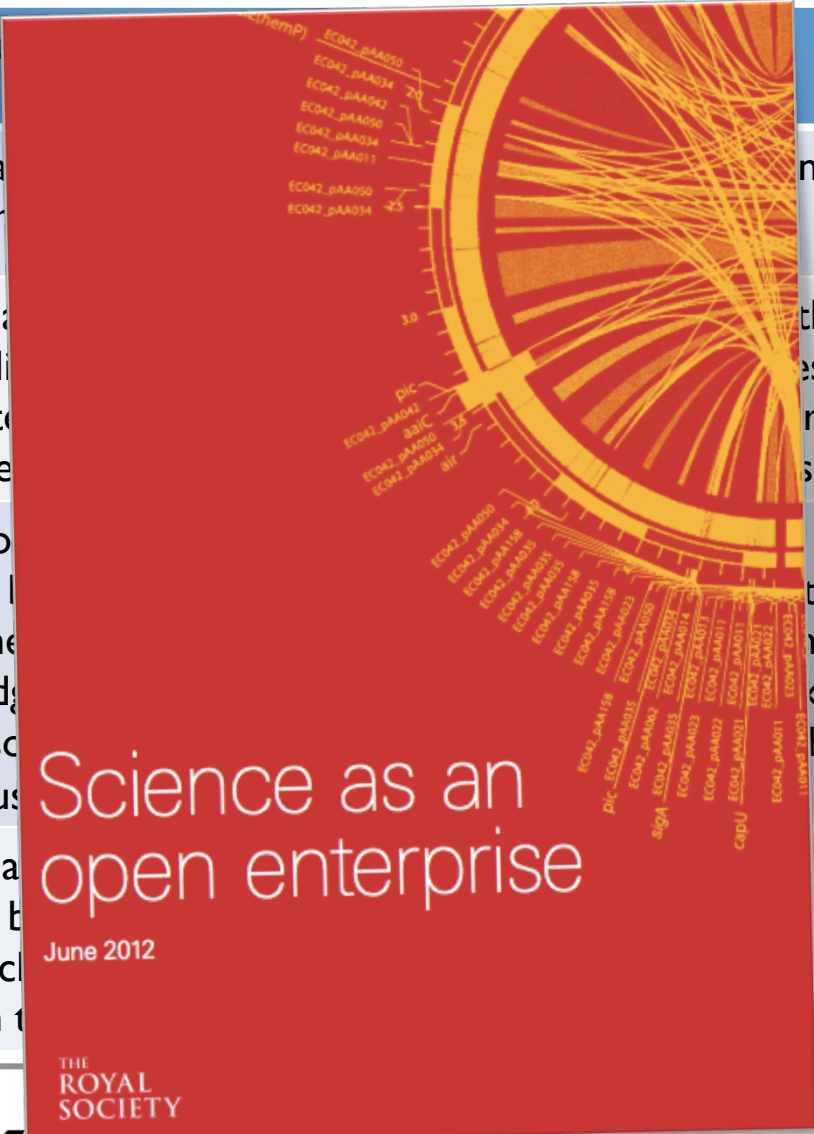


Agenda

- Hintergrund
- Forschungsdaten-Repositoryn
- **„Intelligent Openness“**
- Herausforderungen

„Intelligent Openness“

Terms	Definitions	
accessible	Data should be readily available for	Data should be readily found and in a
assessable	In order to be reliable, the integrity of the data or information's results of scientific work that is	the data or information's results of scientific work that is to be scrutinised. Data must be
intelligible	Communication should be clear to the audience. The audience should be able to judge the claims. Assessability also depends on the trustworthiness of the data.	something. Audiences need to know what is communicated. The audience should be able to judge the claims. Assessability also depends on what might influence public
useable	In order to be used, the data should be able to be accessed, processed, and analysed on the	Information. Data should be able to be used. Therefore will require proper handling. The quality of data will also depend



„Intelligent Openness“

Terms	Definition
accessible	Data must be located in such a manner that it can readily be found and in a form that can be used.
assessable	In a state in which judgments can be made as to the data or information's reliability. Data must provide an account of the results of scientific work that is intelligible to those wishing to understand or scrutinise them. Data must therefore be differentiated for different audiences.
intelligible	Comprehensive for those who wish to scrutinise something. Audiences need to be able to make some judgment or assessment of what is communicated. They will need to judge the nature of the claims made. They should be able to judge the competence and reliability of those making the claims. Assessability also includes the disclosure of attendant factors that might influence public trust.
useable	In a format where others can use the data or information. Data should be able to be reused, often for different purposes, and therefore will require proper background information and meta-data. The usability of data will also depend on those who wish to use them.

„Intelligent Openness“

- Wann soll ich meine Daten zugänglich machen?
- Wie soll ich meine Daten zugänglich machen?
- Wo soll ich meine Daten zugänglich machen?



[RRZE Icon Set](#) (CC: BY-SA)

„Intelligent Openness“

- Wann soll ich meine Daten zugänglich machen?
- Wie soll ich meine Daten zugänglich machen?
- Wo soll ich meine Daten zugänglich machen?

A screenshot of the Global Carbon Project website. The page title is "Global Carbon Budget Data". It features a navigation menu on the left with items like "Home", "Search", "Contact Us", "Site Map", "Carbon Budget", "RECCAP", and "Urbanization". The main content area includes a "Data Sources" section with text explaining the annual update of the Global Carbon Budget and providing links to datasets and modeling output. A table titled "Summary Main Data Sources" is partially visible at the bottom of the screenshot.

Global Carbon Project

Home Search Contact Us Site Map | Carbon Budget RECCAP Urbanization

Carbon Neutral

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Activities

Meetings

Publications

Science

Research Programs

Internet Resources

HIGHLIGHTS Compact | Full
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Global Carbon Budget Data

Data Sources

The annual update of the Global Carbon Budget is possible thanks to many institutions, observational networks and modeling groups around the world.

All datasets and modeling output to complete the Global Carbon Budget 2012 are described in detail in Le Quere et al. (2012) [<http://bit.ly/UJY8GTQ>]

All datasets contributing to this year's update have been integrated in one single file. It is archived at CDIAC doi: http://dx.doi.org/10.3334/CDIAC/GCP_V2012 (Excel, 263kb)

Summary Main Data Sources

Component	Source
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http://dx.doi.org/10.3334/CDIAC/GCP_V2012

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„Intelligent Openness“

- Wann soll ich meine Daten zugänglich machen?
- Wie soll ich meine Daten zugänglich machen?
- Wo soll ich meine Daten zugänglich machen?



Earth Syst. Sci. Data Discuss., 5, 1107–1157, 2012
www.earth-syst-sci-data-discuss.net/5/1107/2012/
doi:10.5194/essdd-5-1107-2012
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The global carbon budget 1959–2011

G C. Le Quéré¹, R. J. Andres², T. Boden², T. Conway³, R. A. Houghton⁴, J. I. House⁵, G. Marland⁶, G. P. Peters⁷,
D G. van der Werf⁸, A. Ahlström⁹, R. M. Andrew⁷, L. Bopp¹⁰, J. G. Canadell¹¹, P. Ciais¹⁰, S. C. Doney¹², C. Enright¹,
Dat P. Friedlingstein¹³, C. Huntingford¹⁴, A. K. Jain¹⁵, C. Jourdain^{1*}, E. Kato¹⁶, R. F. Keeling¹⁷,
ne K. Klein Goldewijk²⁵, S. Levis¹⁸, P. Levy¹⁴, M. Lomas¹⁹, B. Poulter¹⁰, M. R. Raupach¹¹, J. Schwinger²⁰,
Qu S. Sitch²¹, B. D. Stocker²², N. Viovy¹⁰, S. Zaehle²³, and N. Zeng²⁴

All ¹Tyndall Centre for Climate Change Research, University of East Anglia, Norwich Research Park, Norwich, NR4 7TJ, UK
CD ²Carbon Dioxide Information Analysis Center (CDIAC), Oak Ridge National Laboratory, Oak Ridge, Tennessee, USA
Sur ³National Oceanic & Atmosphere Administration, Earth System Research Laboratory (NOAA/ESRL), Boulder, Colorado 80305, USA
Co ⁴Woods Hole Research Centre (WHRC), Falmouth, Massachusetts 02540, USA
⁵Cabot Institute, Dept of Geography, University of Bristol, UK
⁶Research Institute for Environment, Energy, and Economics, Appalachian State University, Boone, North Carolina 28608, USA
⁷Center for International Climate and Environmental Research – Oslo (CICERO), Norway
⁸Faculty of Earth and Life Sciences, VU University Amsterdam, The Netherlands
⁹Department of Physical Geography and Ecosystem Science, Lund University, Sweden

http://dx.doi.org/10.3334/CDIAC/GCP_V2012

<http://dx.doi.org/10.5194/essdd-5-1107-2012>

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„Intelligent Openness“

- Wann soll ich meine Daten zugänglich machen?
- Wie soll ich meine Daten zugänglich machen?
- Wo soll ich meine Daten zugänglich machen?



Earth Syst. Sci. Data Discuss., 5, 1107–1157, 2012
www.earth-syst-sci-data-discuss.net/5/1107/2012/
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The global carbon budget 1959–2011

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¹Tyndall Centre for Climate Change Research, University of East Anglia, Norwich Research Park
²Carbon Dioxide Information Analysis Center (CDIAC), Oak Ridge National Laboratory, Oak Rid
³National Oceanic & Atmosphere Administration, Earth System Research Laboratory (NOAA/ESI
⁴Woods Hole Research Centre (WHRC), Falmouth, Massachusetts 02540, USA
⁵Cabot Institute, Dept of Geography, University of Bristol, UK
⁶Research Institute for Environment, Energy, and Economics, Appalachian State University, Bo
⁷Center for International Climate and Environmental Research – Oslo (CICERO), Norway
⁸Faculty of Earth and Life Sciences, VU University Amsterdam, The Netherlands
⁹Department of Physical Geography and Ecosystem Science, Lund University, Sweden

nature climate change

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Archive > 2013 > January > Commentaries > Article

NATURE CLIMATE CHANGE | COMMENTARY

The challenge to keep global warming below 2 °C

Glen P. Peters, Robbie M. Andrew, Tom Boden, Josep G. Canadell, Philippe Ciais, Corinne Le Quéré, Gregg Marland, Michael R. Raupach & Charlie Wilson

Affiliations | Contributions | Corresponding author

Nature Climate Change 3, 4–6 (2013) | doi:10.1038/nclimate1783
Published online 02 December 2012

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The latest carbon dioxide emissions continue to track the high end of emission scenarios, making it even less likely global warming will stay below 2 °C. A shift to a 2 °C pathway requires immediate significant and sustained global mitigation, with a probable reliance on net negative emissions in the longer term.

http://dx.doi.org/10.3334/CDIAC/GCP_V2012

<http://dx.doi.org/10.5194/essdd-5-1107-2012>

<http://dx.doi.org/10.1038/nclimate1783>

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„Intelligent Openness“

- Wa
- Wi
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Gesundheit | **Umwelt** | Geschichte

TOP-KLIMASÜNDER

Die Welt pustet munter weiter CO2 in die Atmosphäre

Besonders China, Indien und die USA heizen dem Klimawandel weiter kräftig ein. Nur radikale Klimaschutzziele würden helfen. Forscher fürchten eine Erwärmung um fünf Grad.

Während der CO2-Ausstoß in Europa und den USA im vergangenen Jahr zurückgegangen ist, legte er in Schwellenländern wie China und Indien deutlich zu. Das berichtet ein internationales Forscherteam in den Magazinen *Nature Climate Change* und *Earth System Science Data*. Global stiegen die Kohlenstoffdioxid-Emissionen 2011 demnach um drei Prozent auf 34,7 Milliarden Tonnen. Während China ein Plus von knapp zehn Prozent und Indien einen Zuwachs um 7,5 Prozent verzeichnete, pustete die EU 2,8 Prozent und in die USA 1,8 Prozent weniger CO2 in die Atmosphäre. Die neuen Werte wurden mit denen aus dem Jahr 2010 verglichen.

DATUM 03.12.2012
QUELLE ZEIT ONLINE
KOMMENTARE 94
VERSENDEN E-Mail
EMPFEHLEN Facebook
ARTIKEL DRUCKEN
SCHLAGWORTE Europa, China, Indien, CO2, Entwicklungsländer, Peter Altmaier, Corinne

NEU AUF ZEIT ONLINE

1. VENEZUELA Was ble
2. FOTOS DER TRAUER
3. WULFF-AFFÄRE Ank
4. SEXISMUS-DEBATTE kritisieren Gauck
5. DIETER PFAFF Haltu

NEU IM RESSORT

1. LABORSCHLIESSUNG dürfen nicht Schule r

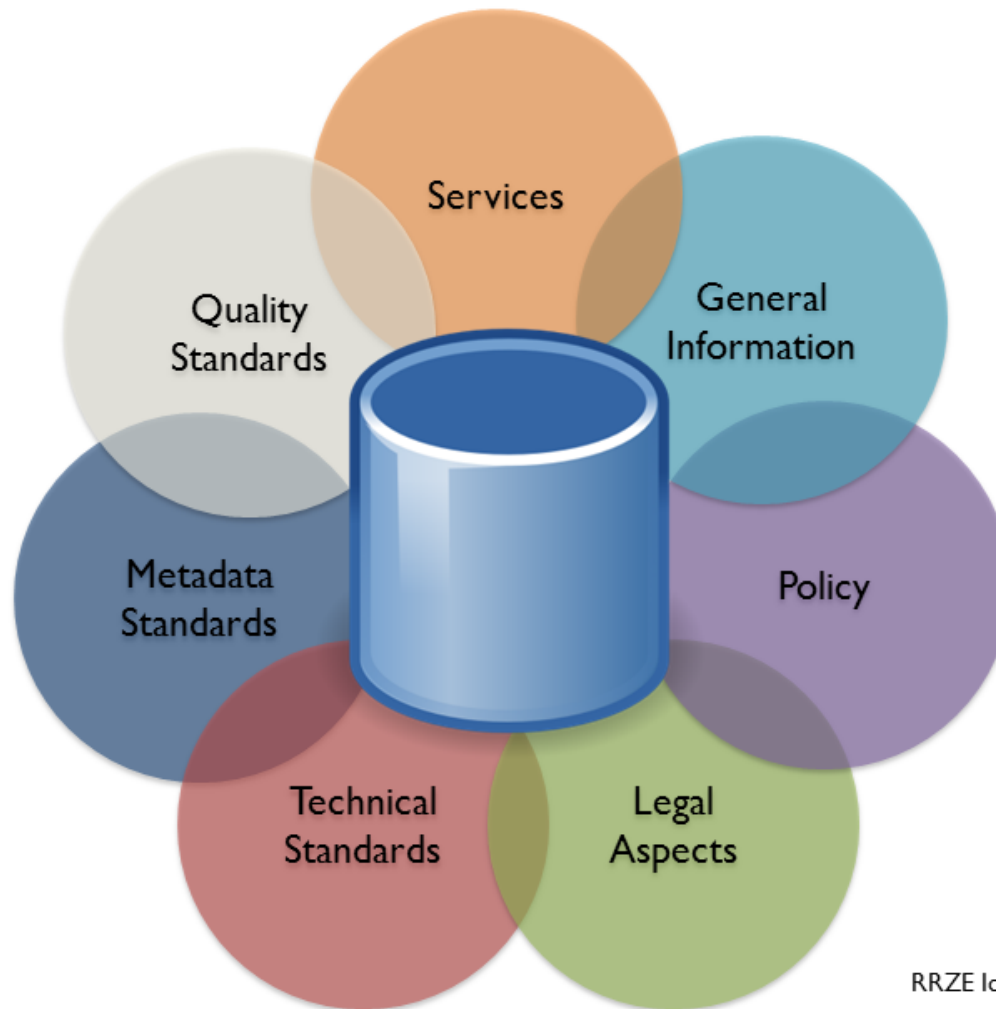


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Agenda

- Hintergrund
- Forschungsdaten-Repositoryen
- „Intelligent Openness“
- **Herausforderungen**

re3data.org: Aspekte



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Anerkennung des „Data Sharings“

- Wissenschaftsrat (WR):

Erhebung und Nachnutzung in geeigneten Forschungsdaten- und Datenservicezentren veröffentlicht werden. Die Erhebung und Publikation von Forschungsdaten sollte als eigenständige Forschungsleistung anerkannt werden. Bereits bei der Beantragung von Forschungsprojekten sollten die personellen

- National Science Foundation (NSF):

Chapter II.C.2.f(i)(c), Biographical Sketch(es), has been revised to rename the “Publications” section to “Products” and amend terminology and instructions accordingly. This change makes clear that products may include, but are not limited to, publications, data sets, software, patents, and copyrights.

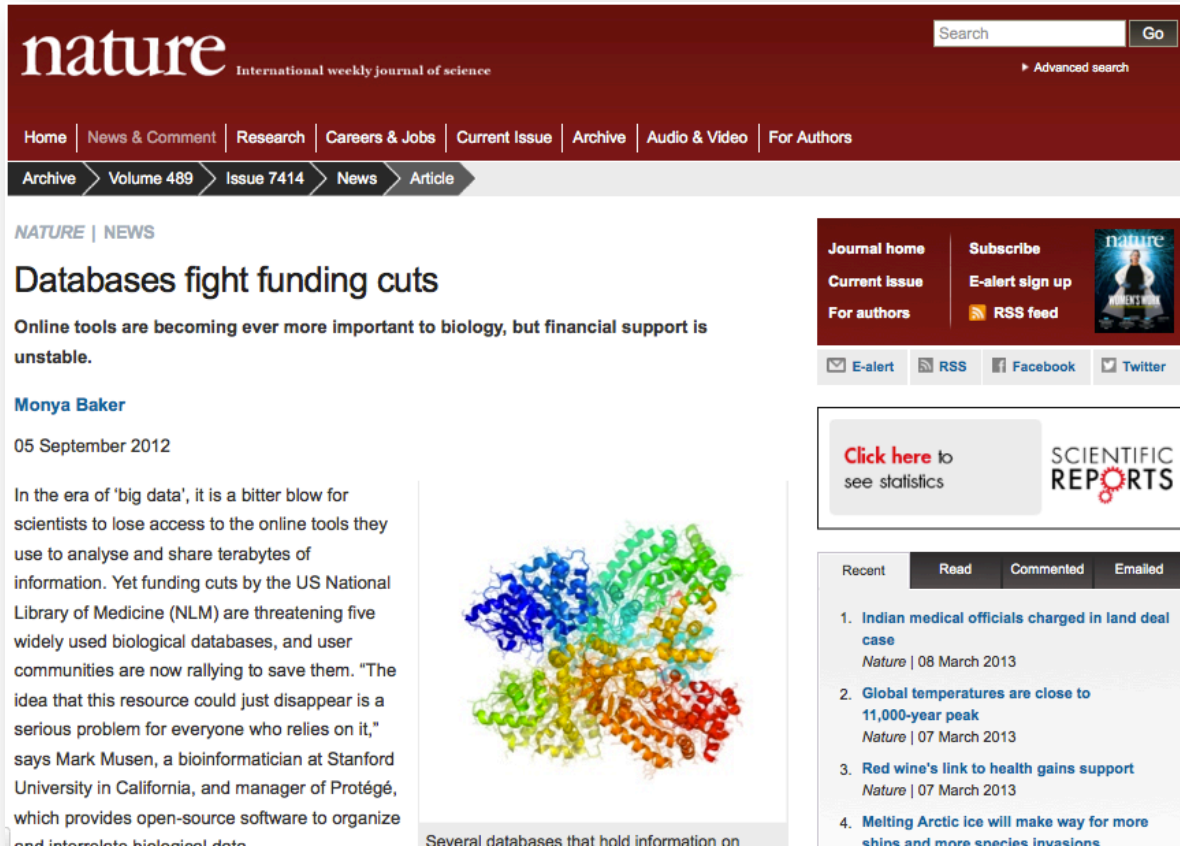
National Science Foundation. (2013). GPG Summary of Changes. Retrieved from http://nsf.gov/pubs/policydocs/pappguide/nsf13001/gpg_sigchanges.jsp

Wissenschaftsrat. (2012). Empfehlungen zur Weiterentwicklung der wissenschaftlichen Informationsinfrastrukturen in Deutschland bis 2020 (Drs. 2359-12).

Retrieved from <http://www.wissenschaftsrat.de/download/archiv/2359-12.pdf>

Finanzierung der Repositorien

- Geschäftsmodelle



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Archive > Volume 489 > Issue 7414 > News > Article

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

In the era of 'big data', it is a bitter blow for scientists to lose access to the online tools they use to analyse and share terabytes of information. Yet funding cuts by the US National Library of Medicine (NLM) are threatening five widely used biological databases, and user communities are now rallying to save them. "The idea that this resource could just disappear is a serious problem for everyone who relies on it," says Mark Musen, a bioinformatician at Stanford University in California, and manager of Protégé, which provides open-source software to organize and interrelate biological data.

Several databases that hold information on

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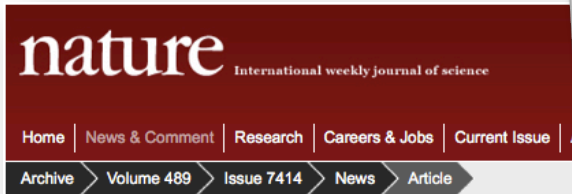
[Click here to see statistics](#) **SCIENTIFIC REPORTS**

Recent	Read	Commented	Emailed
1. Indian medical officials charged in land deal case <i>Nature</i> 08 March 2013			
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3. Red wine's link to health gains support <i>Nature</i> 07 March 2013			
4. Melting Arctic ice will make way for more shins and more species invasions			

Baker, M. (2012). Databases fight funding cuts. *Nature*, 489(7414), 19–19. doi: 10.1038/489019a

Finanzierung der Repositorien

- Geschäftsmodelle



NATURE | NEWS

Databases fight funding cuts

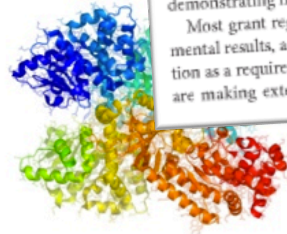
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Several databases that hold information on



In support of the BMRB

The Biological Magnetic Resonance Bank (BMRB) is facing the threat of having its funding discontinued. Concerned about this situation, the editors of *Nature Structural & Molecular Biology* have asked the community why it is important to continue to support the BMRB. We have also asked John Markley, head of the BMRB, to present his case.

A word from the BMRB

Stable funding is essential for a data bank such as the BMRB. Ideally, the funding should support maintenance activities (data deposition, storage and dissemination), growth of the data bank to track the emergence of new types of data, and development of improved technology to reduce costs and improve the impact of the data bank. The BMRB has played a key part in developing standards for the representation of biomolecular NMR data, and continued efforts in this area are needed as new kinds of data, such as those for small-angle X-ray (or neutron) scattering and cryo-EM, are reported and need to be archived. The BMRB, through its association with the Worldwide Protein Data Bank (wwPDB), is participating in the development of new standards and software for the validation of structures determined by NMR spectroscopy. Opportunities exist for expediting the creation of (more extensive) BMRB depositions through collaboration with instrument manufacturers and software developers. Such developments can facilitate the deposition of peak lists associated with assignments and structure determination, as recommended by our advisory-board members. The challenge of the future will be in linking information across different data banks. The wwPDB is leading the way in demonstrating how this can be done.

Most grant regulations now require the timely deposition of experimental results, and an increasing number of journals have data deposition as a requirement for publication. Several growing areas of research are making extensive use of the BMRB. These include investigations

of intrinsically disordered proteins, development of automated analysis of NMR data, solid-state NMR and NMR-based metabolomics.

With the budget cuts that the BMRB has suffered (reduced by 40%, compared to the previous operating budget), we currently are at the minimal level of keeping up with depositions, data validation and data-dictionary development. In addition, the BMRB is barely managing to meet its obligations as a partner in the wwPDB. We have had to lay off people who were developing new software and functionality. The wwPDB advisory-committee meeting, held at Rutgers University on 1 October 2010, had a session on funding, which enabled us to inform members of the US granting agencies about the impending expiration of remaining funding from the National Library of Medicine in September 2014. To date, no plan has been advanced to keep the BMRB functioning. None of the three agencies has expressed an interest in funding more than a part of the needed budget, so a multiagency approach appears to be needed. To stimulate this, BMRB staff members prepared a 'white paper' (see **Supplementary Note**), which was approved by its advisory board and then sent to representatives of the US grant agencies (National Institutes of Health (NIH), Department of Energy and National Science Foundation). Given the lead time for applications and review, it appears critical that a funding plan be developed within the coming year.

John L. Markley, University of Wisconsin–Madison, Madison, Wisconsin, USA

Note: Supplementary information is available at <http://www.nature.com/doifinder/10.1038/nsmb.2371>

Nature | 08 March 2013

2. **Global temperatures are close to 11,000-year peak**
Nature | 07 March 2013
3. **Red wine's link to health gains support**
Nature | 07 March 2013
4. **Melting Arctic ice will make way for more ships and more species invasions**

Markley, J. L., Akutsu, H., Asakura, T., Baldus, M., Boelens, R., Bonvin, A., Kaptein, R., et al. (2012). In support of the BMRB. *Nature structural & molecular biology*, 19(9), 854–60. doi: 10.1038/nsmb.2371

Keeping Research Data Safe Factsheet

Cost issues in digital preservation of research data

This factsheet illustrates for institutions, researchers, and funders some of the key findings and recommendations from the JISC-funded Keeping Research Data Safe (KRDS1) and Keeping Research Data Safe 2 (KRDS2) projects. Further information on the research and findings can be found in the final reports and on the KRDS website.

What Costs Most?

Acquisition and ingest costs most. The costs of archival storage and preservation activities are consistently a very small proportion of the overall costs and significantly lower than the costs of acquisition/ingest or access activities for all our case studies. Note we believe early preservation action during ingest or pre-ingest produces lower costs over the lifecycle as a whole. (KRDS1, p.25; KRDS2, pp.31-52)

Activity Costs for the Archaeology Data Service		
Outreach/ Acquisition/ Ingest	Archival Storage and Preservation	Access
c. 55%	c. 15%	c. 31%

Recommendation to Funders

From our research, it is likely that the largest potential cost efficiencies will come from future tool development supporting automation of ingest and access activities for curation and preservation. (KRDS2, p.83)

Impact of Fixed Costs

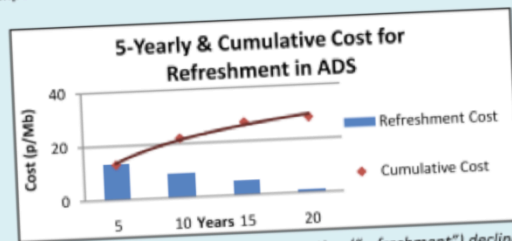
- The costs of long-term data curation/preservation are dominated by fixed costs that do not vary with the size of the collections;
- Staff are the major cost component overall and there is a minimum base-level of staff cover, skills and equipment required for any service;
- Activities characterised by significant fixed costs can reduce the per-unit cost of long-term preservation by leveraging economies of scale. (KRDS2, pp.32-34, 79-80)

Recommendation to Institutions

Repositories should take advantage of economies of scale, using multi-institutional collaboration and outsourcing as appropriate. Once core capacity is in place additional content can be added at increasing levels of efficiency and lower cost. (KRDS1, pp.77-78)

Declining Costs over Time

We found a trend of relatively high preservation costs in the early years reducing substantially over time for data collections. An example is the preservation costs projected for the Archaeology Data Service (ADS) based on their experience of the first 10 years of operating the data service. (KRDS1, pp.4-6)



Costs for archival storage and preservation ("refreshment") decline to a minimal level over 20 years

Recommendation to Funders and Institutions

The implications of these factors and projection for sustainability of data archives e.g. via archive charges to project budgets, are notable and worthy of more extensive study and testing. (KRDS1, pp.5-6)

stitorien

Beagrie, C. (2011). Keeping Research Data Safe Factsheet. Cost issues in digital preservation of research data. Retrieved from http://www.beagrie.com/KRDS_Factsheet_0711.pdf

Keeping Research Data Safe Factsheet

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Activity Costs for the Archaeology Data Service

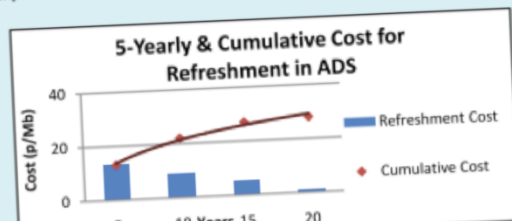
Recommendation to Funders

From our research, it is likely that the largest potential cost efficiencies will come from future tool development supporting automation of ingest and access activities for curation and preservation.

Unabhängig davon ist festzuhalten, dass der dauerhafte Betrieb von Forschungsdatenzentren als Teil der Forschungskosten etabliert werden muss und grob geschätzt einen dauerhaft zu finanzierenden Anteil von 5 % bis 10 % für den Bereich der „Datenpflege“ an den Gesamtkosten für Forschung vorzusehen ist. Um international kompetitiv zu bleiben bedeutet dies, dass auch in Deutschland mittelfristig etwa 5 % bis 10 % der Forschungskosten zusätzlich für nachhaltige „Datenbereitstellung“ aufgebracht werden müssen.

Declining Costs over Time

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Kommission Zukunft der Informationsinfrastruktur. (2011). Gesamtkonzept für die Informationsinfrastruktur in Deutschland. Retrieved from http://www.allianz-initiative.de/fileadmin/user_upload/KII_Gesamtkonzept.pdf

Vertrauenswürdige Repositorien

- **Auditierung und Zertifizierung**
 - Braun, K., et al. (2010). **DINI-Zertifikat Dokumenten- und Publikationsservice 2010** (3.0 ed.). Göttingen. Retrieved from <http://nbn-resolving.de/urn:nbn:de:kobv:11-100109986>
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 - ESF & EUROHORCS. (2011). **Basic Requirements for Research Infrastructures in Europe**. Retrieved from http://www.dfg.de/download/pdf/foerderung/programme/wgi/basic_requirements_research_infrastructures.pdf
 - NESTOR. (2008). Kriterienkatalog vertrauenswürdige digitale Langzeitarchive. Version 2. Retrieved from <http://nbn-resolving.de/urn:nbn:de:0008-2008021802> >> **DIN-Norm 31645**
 - ICSU World Data System (WDS). (2011). **Certification of World Data System Members**. Retrieved from http://icsu-wds.org/images/files/WDS_Certification_Summary_11_June_2012.pdf

ODE: Briefing Sheets on Data Sharing

The image displays three overlapping briefing sheets for the Opportunities for Data Exchange (ODE) project. Each sheet is designed for a specific audience: researchers, librarians, and publishers. The sheets are arranged in a slightly overlapping manner, with the researcher sheet on the left, the librarian sheet in the middle, and the publisher sheet on the right. Each sheet features a header with the ODE logo and the title 'Opportunities for Data Sharing'. The main body of each sheet contains introductory text, a section titled 'Why should you as a [researcher/librarian/publisher] care about data sharing?', and a call to action at the bottom with the website www.ode-project.eu/ode-outputs. The researcher sheet includes a photograph of a person in a space helmet. The librarian sheet features a large 'LIBRARY' sign. The publisher sheet shows a person at a computer workstation with data charts on the screen. The sheets also include logos for the APA (Association for Public Access) and the European Union FP7-funded program.

THE ODE PROJECT / RESEARCHERS

Opportunities for Data Sharing

There is a growing consensus in science, and society generally, that research data resulting from publicly funded research should be shared widely so that the maximum benefits can be gained from the investment. There are common barriers and some reluctance, but also powerful drivers and benefits related to putting this general principle into practice.

Why should you as a researcher care about data sharing?

Successful examples, such as sharing data through the Worldwide Protein Data Bank, Pangaea and GenBank, clearly demonstrate that data sharing can provide enormous benefits. Introducing or intensifying data sharing in your discipline may be worth the effort as well.

Do you know about data sharing?

The EU FP7-funded ODE project has collected views from a representative of all research groups – on the opportunities and challenges of data exchange. These views are consolidated in order to support researchers with various services and tools to facilitate data exchange.

To obtain more results from our research, please visit: www.ode-project.eu/ode-outputs

THE ODE PROJECT / LIBRARIAN

Opportunities for Data Sharing

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Why should you as a librarian care about data sharing?

As a librarian you are known for your expertise in enabling access to information resources for researchers. You can further expand and utilise your knowledge of adding value to and preservation of research outputs to support researchers with various services and tools to facilitate data exchange.

To obtain more results from our research, please visit: www.ode-project.eu/ode-outputs

THE ODE PROJECT / PUBLISHERS

Opportunities for Data Sharing

There is a growing consensus in science, and society generally, that primary research data resulting from publicly funded research should be shared widely so that the maximum benefits can be gained from the investment. There are common barriers and some reluctance, but also powerful drivers and benefits related to putting this general principle into practice.

Why should you as a publisher care about data sharing?

As a publisher you are probably aware of the increased demand on, and from, authors to make the data underpinning their research articles available. In many fields, journals have adapted to the growing practice of linking to and from datasets deposited in data archives and subject specific repositories such as GenBank, Pangaea and the Worldwide Protein Data Bank. Other journals, often in areas with less well organised central data repositories, have experienced an explosive increase in the amount of supplementary material added to journal articles, mainly data sets.

To obtain more results from our research, please visit: www.ode-project.eu/ode-outputs

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Memorandum of Understanding between DataCite and re3data.org

Posted on **April 13, 2012** by [re3data.org team](#)

We are pleased to announce a Memorandum of Understanding between [DataCite](#) and [re3data.org](#). With this Memorandum of Understanding DataCite and re3data.org define their efforts to enhance accessibility and visibility of data sets.

DataCite is an international consortium to facilitate easier access to scientific research data on the internet, increase acceptance of research data as legitimate, citable contributions to the scientific record, and to support data archiving that will allow results to be verified and re-purposed for future study.

PARTNERS



Danke für Ihre Aufmerksamkeit!

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http://re3data.org



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