

## デジタルトランスフォーメーション(DX)時代のデータ キュレーションと情報管理

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# Linking Scholarly Journal Articles with Associated Data and Dataset Repositories

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Updated October 2020

**I ILLINOIS**  
University Library

# Library Discovery Systems

- There is a general consensus that library discovery systems “require a fundamental re-orientation to the needs of the user” –OhioLink study, 2020.
- Studies show users have issues with the web-scale discovery systems typically used in academic libraries.
- The University of Illinois Library has developed the *Easy Search* information discovery and delivery system, emphasizing expanded access to information resources through value-added links.

# Easy Search Discovery and Delivery System

- Committed to providing a discovery environment that serves as a one-stop-shopping platform for users.
- Easy Search employs a bento-style display with search results displayed in partitioned screen areas by format type – journal articles, books, local materials, web results.
- Employs variety of information resource APIs that are asynchronously searched and displayed on the screen – using article DOIs (Digital Object Identifiers) as the connecting glue.

# Importance of Data in Scholarly Research

- Data management and curation are important elements in the scholarly workflow.
- Researchers take a holistic view of the research lifecycle and treat data as one of many elements in the scholarly communication workflow.
- Data generation, usage, storage, and sharing are an integrated aspect of a larger scholarly workflow.
- Data sharing mandates and growth of data sharing and reuse for research verification and reproducibility

# Dataset Repositories

- Large number of local and regional dataset repositories (institutional repositories: Illinois Data Bank, Kyushu University QIR), disciplinary repositories (Protein Data Bank, PANGAEA), interdisciplinary dataset repositories (Dryad, DataCite, FigShare).
- Easy Search uses the *Scholix Framework for Scholarly Link Exchange* <http://www.scholix.org/> API to connect retrieved journal article DOIs with the associated data used by the article authors and deposited in dataset repositories.

## Example Search results with Dataset Repository Links

- The Scholix links are displayed with the article search results along with other complementary links such as the Altmetric badge links, open access links from Unpaywall, full-text links from Browzine, DOI links, Bing API results, and Libguide match links.
- The Scholix links provide access to the data that was generated and/or used in a particular published research project; show what dataset repositories were used by researchers; and can help identify relevant dataset repositories for Easy Search users.

# ILLINOIS LIBRARY

Search:

**Suggestions:**

## Articles – 43 Results

**1: Crystal Structure of the Minimal Cas9 from Campylobacter jejuni Reveals the Molecular Diversity in the CRISPR-Cas9 Systems**

Yamada, M.; Watanabe, Y.; Hirano, H.; Nakane, T.; Ishitani, R.; Nishimasu, H.; Nureki, O.; Gootenberg, J.S.; *Molecular Cell* vol: 65, issue 6, 2017, pp. 1109-1119. Scopus®, Academic Journal

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- [Dataset-1](#) [Dataset-2](#) [Dataset-3](#) [Dataset-4](#) [Dataset-5](#) [Dataset-6](#) [Dataset-7](#) [Dataset-8](#) [Dataset-9](#)



**2: Crystal Structure of the Minimal Cas9 from Campylobacter jejuni Reveals the Molecular Diversity in the CRISPR-Cas9 Systems.**

Yamada M; Watanabe Y; Gootenberg JS; Hirano H; Ran FA; Nakane T; Ishitani R; Zhang F; *Molecular Cell* vol: 65, issue 6, 2017, pp. 1109-1121.e3-MEDLINE, Academic Journal

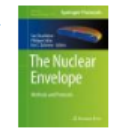
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- [PDF Link](#)
- [Issue Table of Contents](#)

## Library Catalog – 8 Results

**1: Plastids : methods and protocols (E-book)**  
 ● Status: (E-book) SpringerLink – Full text online  
 2018



**2: The nuclear envelope : methods and protocols (E-book)**  
 ● Status: (E-book) SpringerLink – Full text online  
 ©2016



**3: Gastrointestinal physiology and diseases : methods and protocols (E-book)**  
 ● Status: (E-book) SpringerLink – Full text online  
 2016



**4: Butterfly wing patterns and mimicry (E-book)**  
 ● Status: (E-book) ScienceDirect – Full text online  
 2018



**5: Innate antiviral immunity : methods and protocols (E-book)**  
 ● Status: (E-book) SpringerLink – Full text online



## Subject Suggestions

- Biological Sciences**
- PubMed (NLN) **70 Article Matches**
  - Consumer Health Complete **0 Article Matches**

**More resources**  
[Biology Virtual Library](#)

**Contact Librarian**  
 Kelli Trei

- Other Resources**
- Title Word Matches (CrossRef) **1727958 Article Matches**
  - WorldCat Discovery **26 Article Matches**
  - I-Share Statewide Catalog **10 Article Matches**

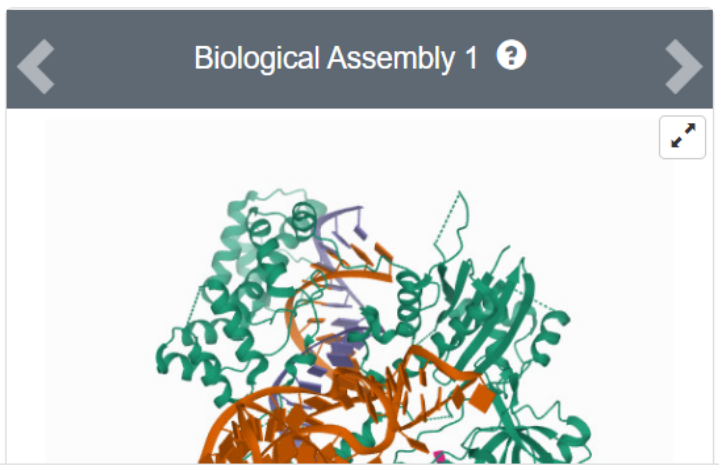


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# 5X2G

Crystal structure of Campylobacter jejuni Cas9 in complex with sgRNA and target DNA (AGAAACC PAM)

DOI: 10.2210/pdb5X2G/pdb NDB: 5X2G

Classification: HYDROLASE/RNA/DNA

Organism(s): Campylobacter jejuni subsp. jejuni NCTC 11168 = ATCC 700819, Campylobacter jejuni, synthetic construct

Expression System: Escherichia coli

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Schnaik, w.; van Pijkeren, J.-P.;  
*FEMS Microbiology Letters* vol: 366, issue 22, 2020  
 Scopus®, Academic Journal

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Altmetric 10

5: A ribonucleoprotein transfection strategy for CRISPR/Cas9-mediated gene editing and single cell cloning in rainbow trout cells.

Zoppo, Marina; Okoniewski, Nicole; Pantelyushin, Stanislav; vom Berg, Johannes; Schirmer, Kristin;  
*Cell & Bioscience* vol: 11, issue 1, 2021, pp. 1-15  
 Complementary Index, Academic Journal

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Altmetric 2

6: CRISPR-Cas9, the new kid on the block of fungal molecular biology

Kranemann, S.

### Subject Suggestions

#### Biological Sciences

PubMed (NLM)	3911 Article Matches
Consumer Health Complete	0 Article Matches

#### More resources

[Biology Virtual Library](#)

#### Contact Librarian

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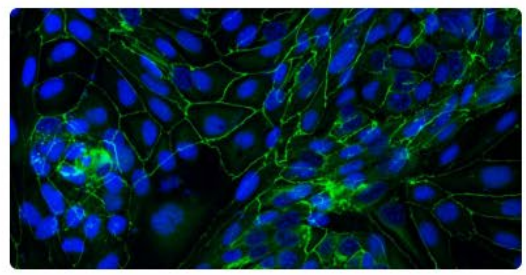
### Other Resources

Title Word Matches (CrossRef)	3141449 Article Matches
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Home / Organizations / Animal cells and organisms / Data for: A ...

### Data for: A ribonucleoprotein transfection strategy for CRISPR/Cas9-mediated gene editing and single cell cloning in rainbow trout cells

Organization



Package Projects Activity Stream

[doi https://doi.org/10.25678/0002YM](https://doi.org/10.25678/0002YM)

## Data for: A ribonucleoprotein transfection strategy for CRISPR/Cas9-mediated gene editing and single cell cloning in rainbow trout cells

**Background.** The advent of the CRISPR/Cas9 technology marked the beginning of a new era in the field of molecular biology, allowing the efficient and precise creation of targeted mutations in the genome of every living cell. Since its discovery, different gene editing approaches based on the CRISPR/Cas9 technology have been widely established in mammalian cell lines, while

4: **Genome-Wide DNA Methylation in Peripheral Blood and Long-Term Exposure to Source-Specific Transportation Noise and Air Pollution: The SAPALDIA Study.**  
 Eze, Ikenna C.; Jeong, Ayoung; Schaffner, Emmanuel; Rezwani, Faisal I.; Ghantous, Akram; Foraster, Maria; Vienneau, Danielle; Kronenberg, Florian;  
*Environmental Health Perspectives* vol: 128, issue 6, 2020, pp. 067003-1- +14  
 Health Source - Consumer Edition, Academic Journal

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Altmetric 4

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Altmetric 10

5: **Enriched Conformational Sampling of DNA and Proteins with a Hybrid Hamiltonian Derived from the Protein Data Bank.**  
 Peter EK; Cerny J;  
*International journal of molecular sciences* vol: 19, issue 11, 2018  
 MEDLINE Academic Journal

6: **Advances in food diagnostics**  
 Available Online  
 Nollet, Leo M. L., 1948-  
 Blackwell Pub. 2007

UIUC E-Resource Link

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**Subject Suggestions**

**Biological Sciences**

PubMed (NLM)	364742 Article Matches
Consumer Health Complete	10 Article Matches

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 Biology Virtual Library

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(IPDPS), 2017 IEEE International, IPDPS 2017, pp. 1  
IEEE Xplore Digital Library, Conference  
Get Fulltext Online Catalog Link IEEE Link  
Other Fulltext Links

### 3: Statistical binning enables an accurate coalescent-based estimation of the avian tree.

Mirarab, Siavash; Bayzid, Shamsuzzoha; Boussau, Bastien; Warnow, Tandy;  
*Science* vol: 346, issue 6215, 2014, pp. 463-1- +9  
Academic Search Ultimate, Academic Journal

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Dataset-6 Dataset-7 Dataset-8 Dataset-9 Altmetric 94

### 4: Response to Comment on "Statistical binning enables an accurate coalescent-based estimation of the avian tree".

Mirarab, Siavash; Bayzid, Shamsuzzoha; Boussau, Bastien; Warnow, Tandy;  
*Science* vol: 350, issue 6257, 2015, pp. 171-b- +3  
Academic Search Ultimate, Academic Journal

3: Sequence Alignments and Trees for Avian 1X for Mirarab et. al.  
Available Online  
Mirarab, Siavash  
Resource Link

4: Sequence Alignments and Trees for Avian 0.5X for Mirarab et. al.  
Available Online  
Mirarab, Siavash  
Resource Link

5: Bin Definition for Super Gene Trees for Mirarab et. al.  
Available Online  
Mirarab, Siavash  
Resource Link

6: Sequence Alignments and Trees for Mammalian 1X for Mirarab et. al.  
Available Online  
Mirarab, Siavash

https://libeasysch19dev.library.illinois.edu/discovery/sourcelog.asp?writetodb=yes&ID=1169351&ebscotextjstor--https://proxy2.library.illinois.edu/login?url=http://www.jstor.org/openurl?issn=00368075&date=2014&volume=346...

