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

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

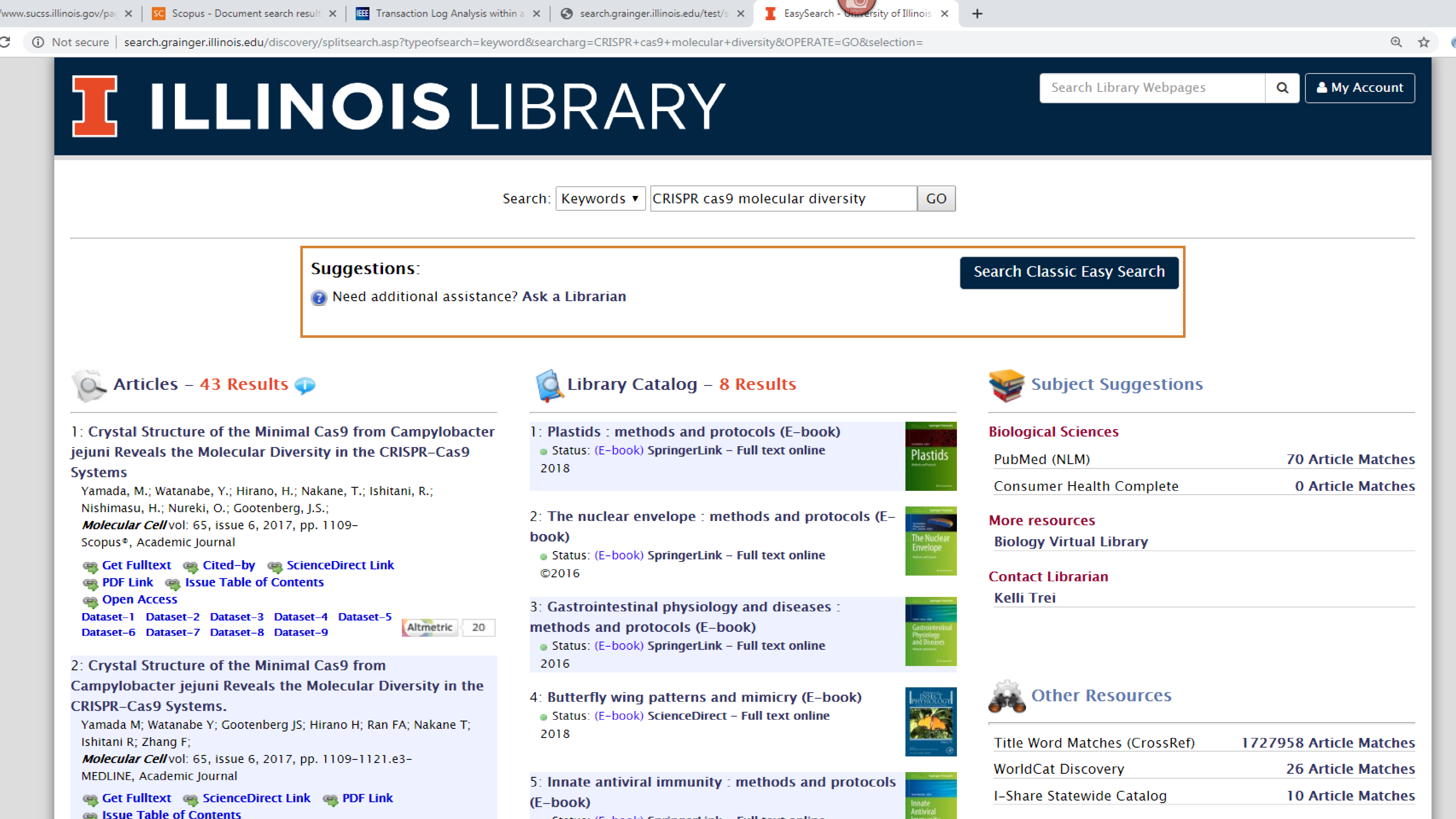
- Large number of local and regional dataset repositories (institutional repositories: Illinois Data Bank, Kyushu University QIR), disciplinary repositories (Protein Data Bank, PANGAEA), interdisciplinary dataset repositories (Dryad, DataCite, FigShare).

- 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.



search.grainger.illinois.edu/discovery/splitsearch.asp?typeofsearch=keyword&searcharg=CRISPR+cas9+molecular+diversity&OPERATE=GO&selection=

Search: Keywords ▾ CRISPR cas9 molecular diversity GO

Suggestions:

Need additional assistance? **Ask a Librarian**

Search Classic Easy Search

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–
Scopus®, Academic Journal

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Altmetric 20

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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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)**

Subject Suggestions

Biological Sciences

PubMed (NLM)	**70 Article Matches**
Consumer Health Complete	**0 Article Matches**

More resources

Biology Virtual Library

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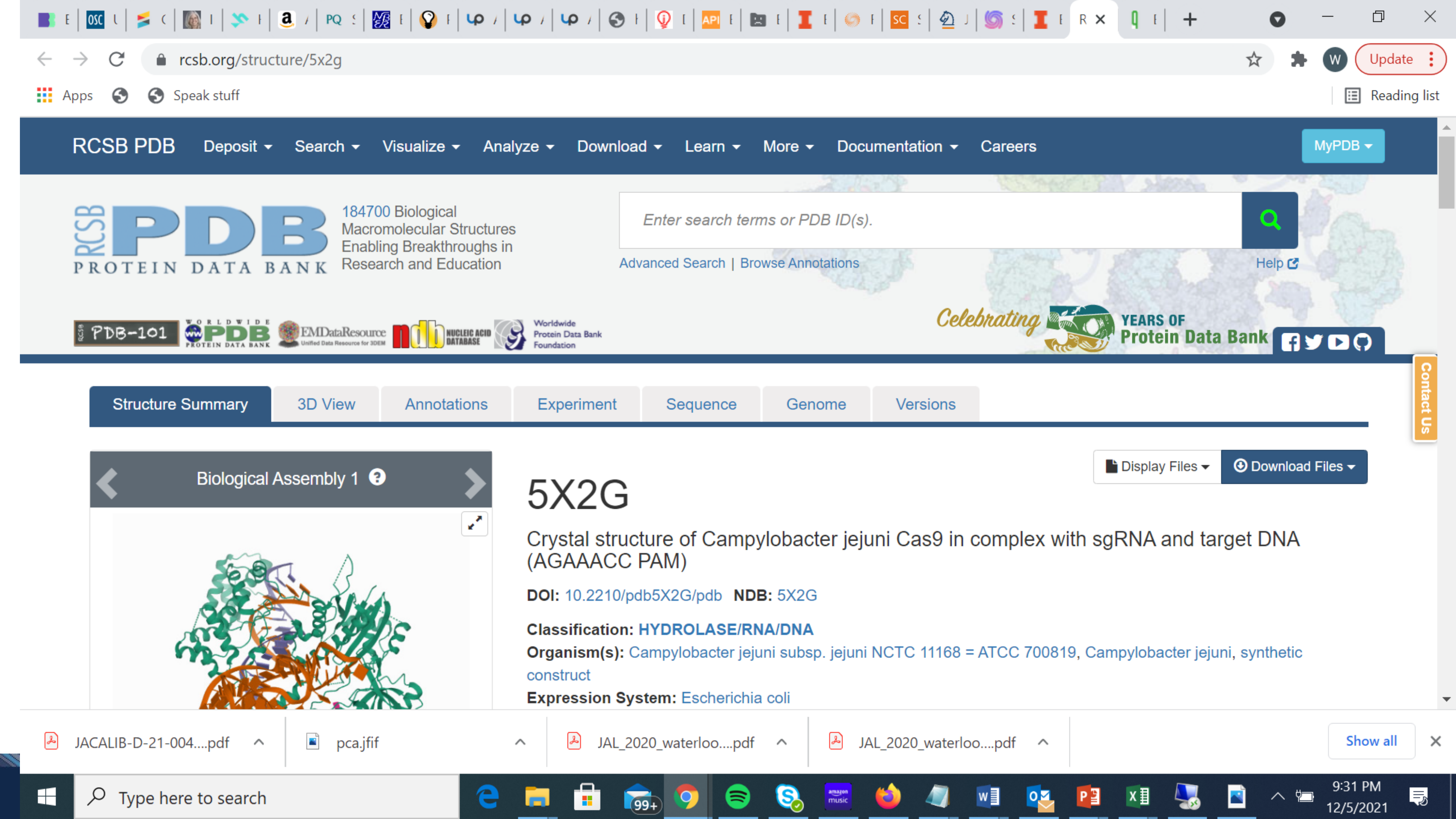
Kelli Trei

Other Resources

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



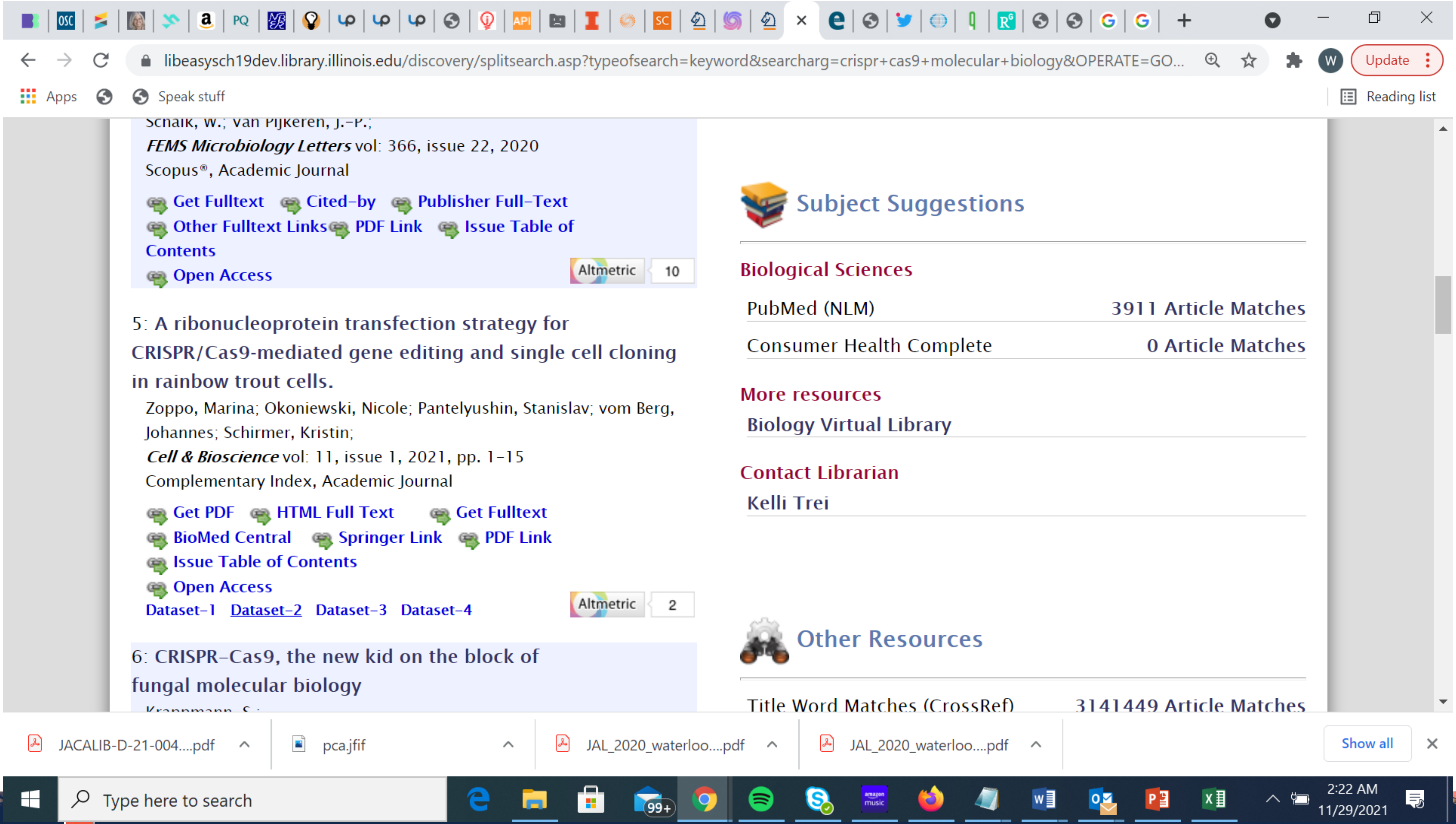
184700 Biological Macromolecular Structures Enabling Breakthroughs in Research and Education

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



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

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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
Krappmann, S.;

Subject Suggestions

Biological Sciences

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

More resources

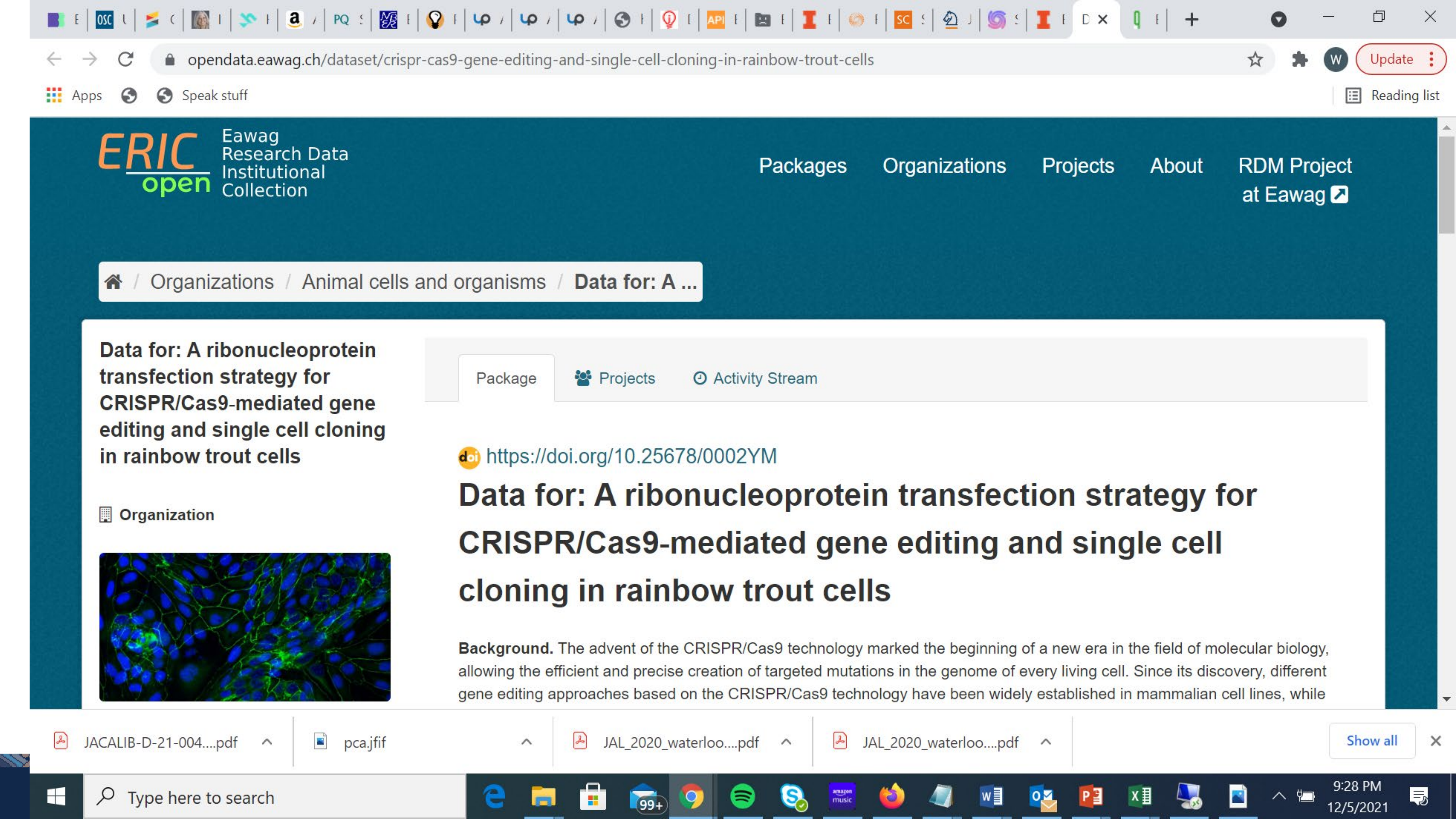
Biology Virtual Library

Contact Librarian

Kelli Trei

Other Resources

Title Word Matches (CrossRef)	3141449 Article Matches

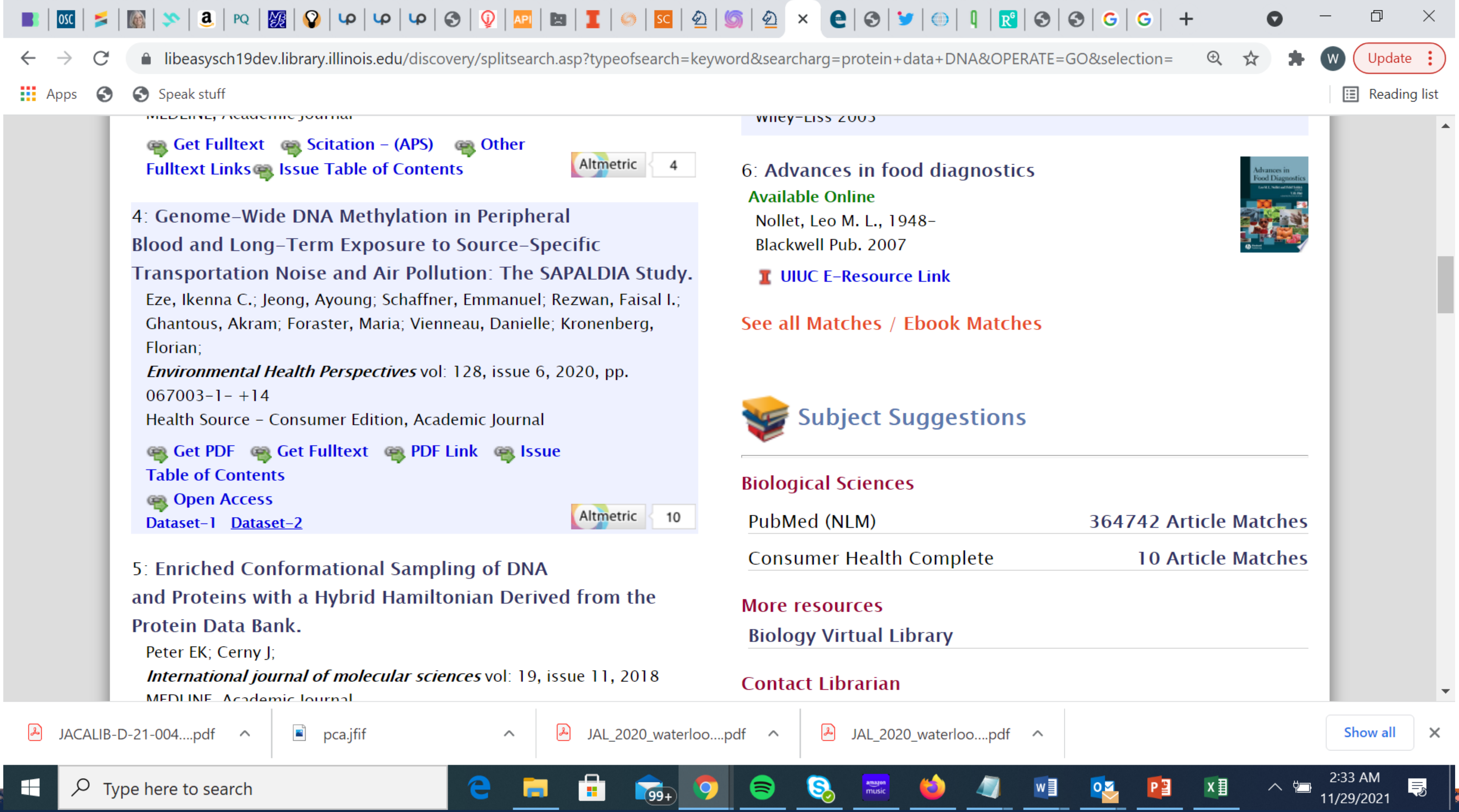


Data for: A ribonucleoprotein transfection strategy for CRISPR/Cas9-mediated gene editing and single cell cloning in rainbow trout cells

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



MEDLINE, Academic Journal

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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; Rezwan, 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 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

Wiley-Liss 2003

6: Advances in food diagnostics

Available Online

Nollet, Leo M. L., 1948-

Blackwell Pub. 2007

UIUC E-Resource Link

See all Matches / Ebook Matches

Subject Suggestions

Biological Sciences

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

More resources

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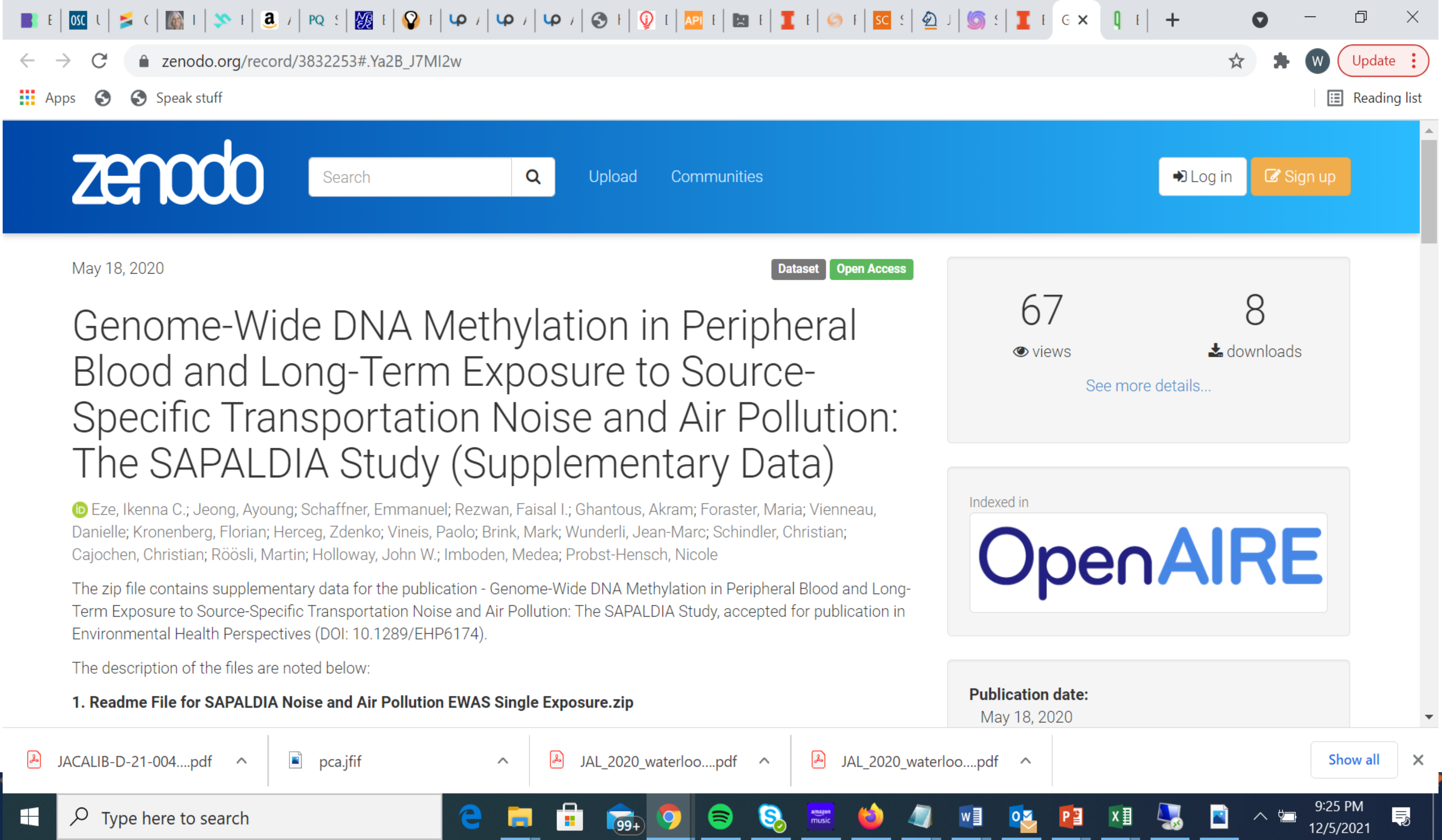


May 18, 2020

Genome-Wide DNA Methylation in Peripheral Blood and Long-Term Exposure to Source-Specific Transportation Noise and Air Pollution: The SAPALDIA Study (Supplementary Data)

Eze, Ikenna C.; Jeong, Ayoung; Schaffner, Emmanuel; Rezwan, Faisal I.; Ghantous, Akram; Foraster, Maria; Vienneau, Danielle; Kronenberg, Florian; Herceg, Zdenko; Vineis, Paolo; Brink, Mark; Wunderli, Jean-Marc; Schindler, Christian; Cajochen, Christian; Röösli, Martin; Holloway, John W.; Imboden, Medea; Probst-Hensch, Nicole

The zip file contains supplementary data for the publication - Genome-Wide DNA Methylation in Peripheral Blood and Long-Term Exposure to Source-Specific Transportation Noise and Air Pollution: The SAPALDIA Study, accepted for publication in Environmental Health Perspectives (DOI: 10.1289/EHP6174).

The description of the files are noted below:

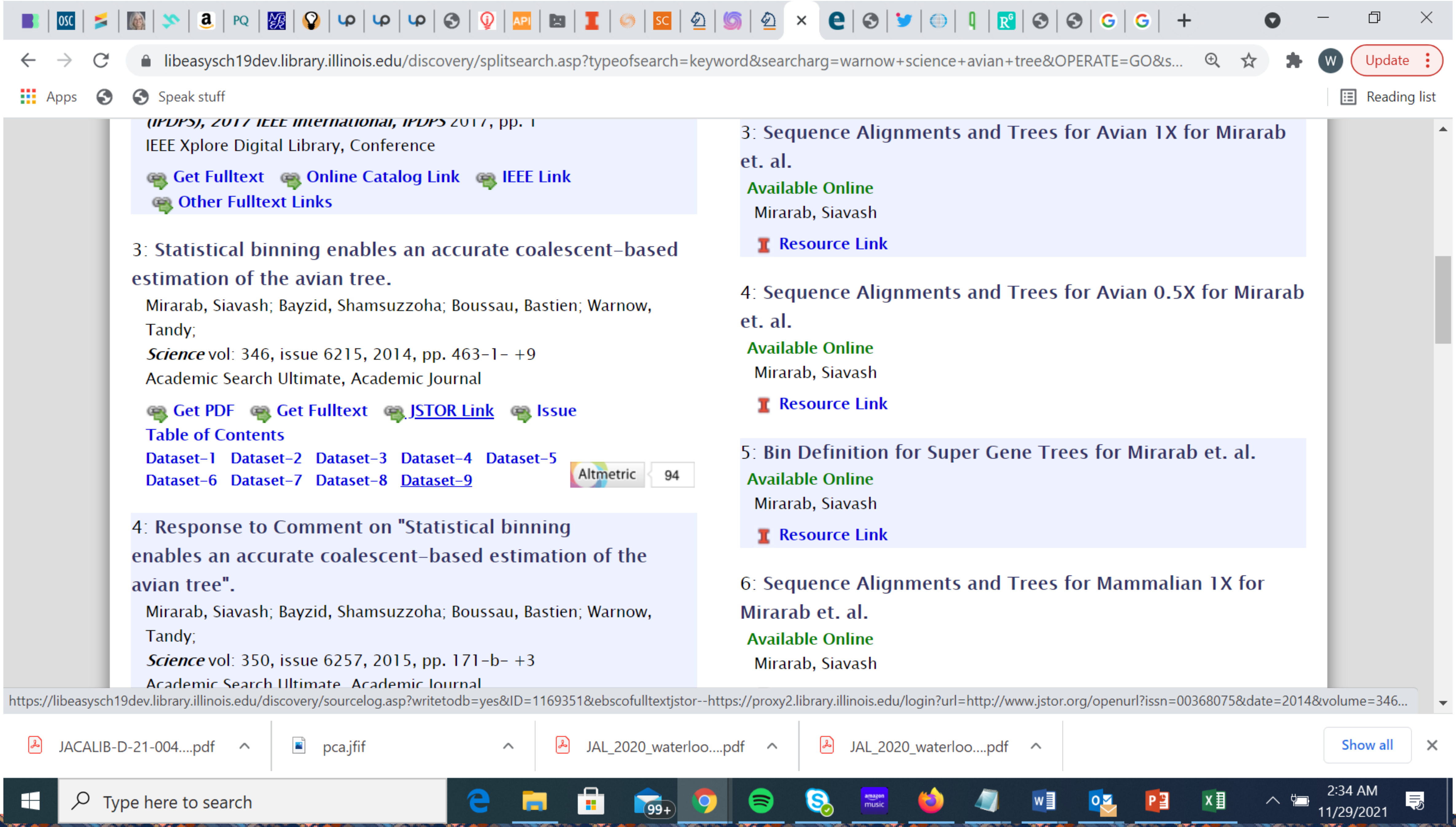
1. Readme File for SAPALDIA Noise and Air Pollution EWAS Single Exposure.zip

67 views

8 downloads

See more details...

Publication date:
May 18, 2020



(IPDPS), 2017 IEEE International, IPDPS 2017, pp. 1

IEEE Xplore Digital Library, Conference

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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

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Dataset-6 Dataset-7 Dataset-8 Dataset-9

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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

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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

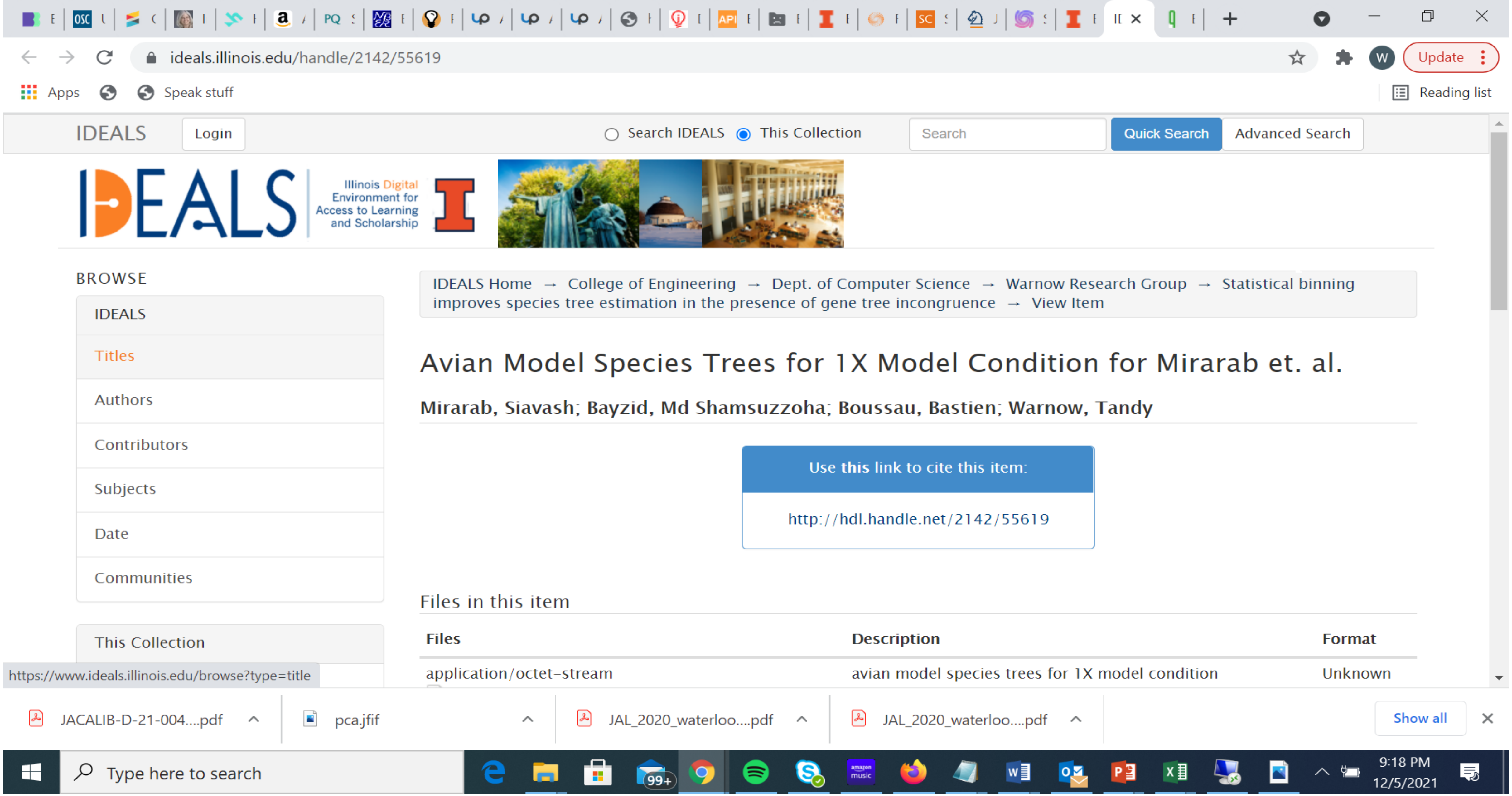
Resource Link

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&ebscofulltextjstor--https://proxy2.library.illinois.edu/login?url=http://www.jstor.org/openurl?issn=00368075&date=2014&volume=346...



IDEALS Home → College of Engineering → Dept. of Computer Science → Warnow Research Group → Statistical binning improves species tree estimation in the presence of gene tree incongruence → View Item

Avian Model Species Trees for 1X Model Condition for Mirarab et. al.

Mirarab, Siavash; Bayzid, Md Shamsuzzoha; Boussau, Bastien; Warnow, Tandy

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http://hdl.handle.net/2142/55619

Files in this item

Files	Description	Format
application/octet-stream	avian model species trees for 1X model condition	Unknown