



Dataset Identification & Citation:

DataCite and EZID

Laine Farley

Executive Director
California Digital Library

November 30, 2011

Dataset Identification & Citation

Life before DataCite

The research data problem
Each repository is an island...

A life cycle approach

DataCite

“Helping you find, access and reuse data.”

EZID

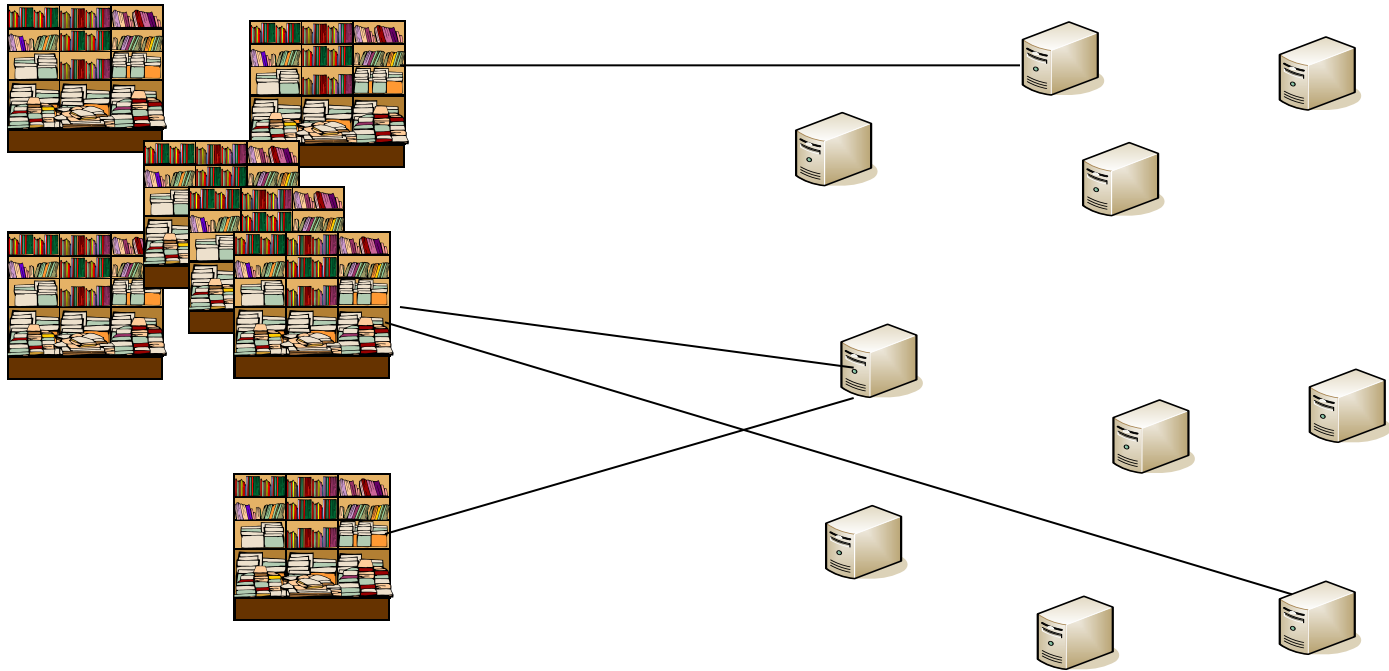
Easy creation and management of DataCite DOIs and other identifiers.

Next steps

The research data problem

Journal Articles	Research Data
Uniquely and persistently identified	Nope
Concept of “publish”	Not really
Multiple copies	Typically one
Easily findable	Difficult
Additional services: impact metrics, citation tracking, etc.	Nope
	➤ <i>Second-class citizens in scholarly record</i>

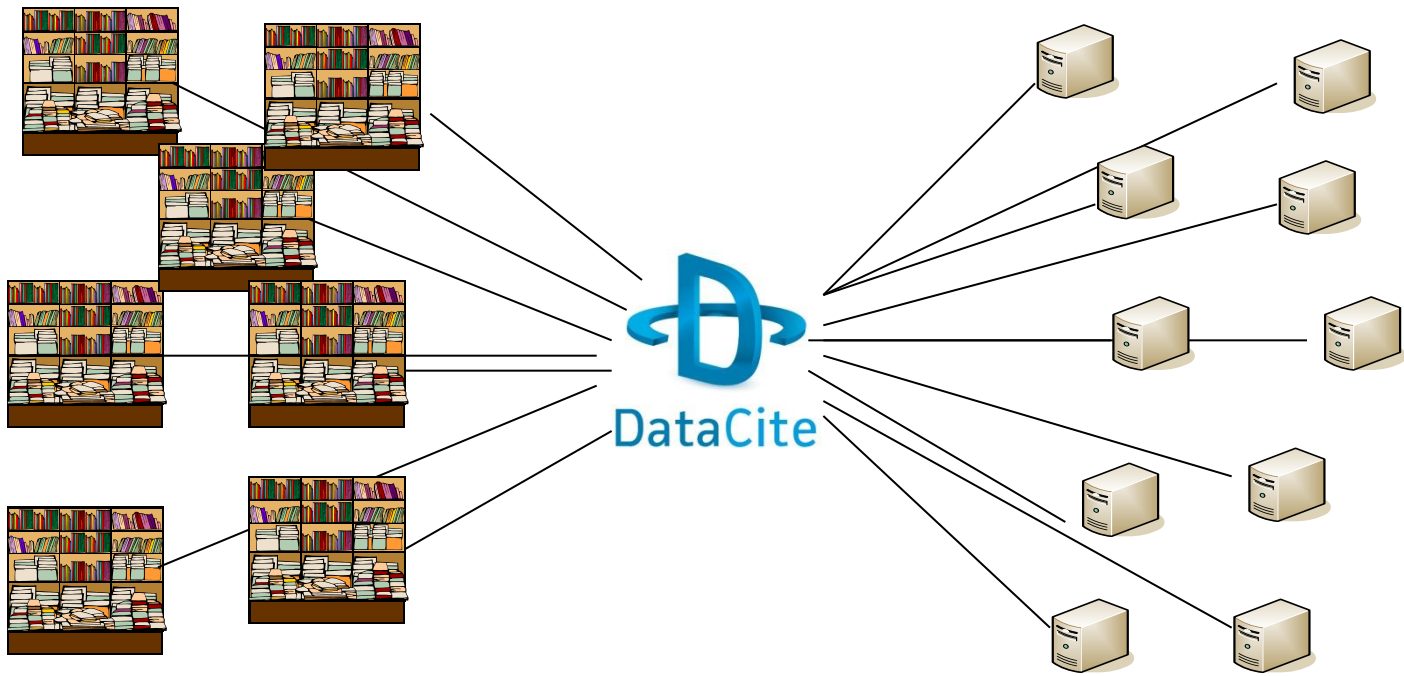
Before DataCite...



Publishers

Data centers and Repositories

With DataCite...



Publishers

Data centers and Repositories

The image features a blue background with a subtle grid pattern and a network diagram of interconnected nodes and lines. The nodes are represented by circles of varying sizes, and the lines are thin and light blue. The text is centered on the left side of the image.

DataCite

Creating
a global
citation
framework
for data

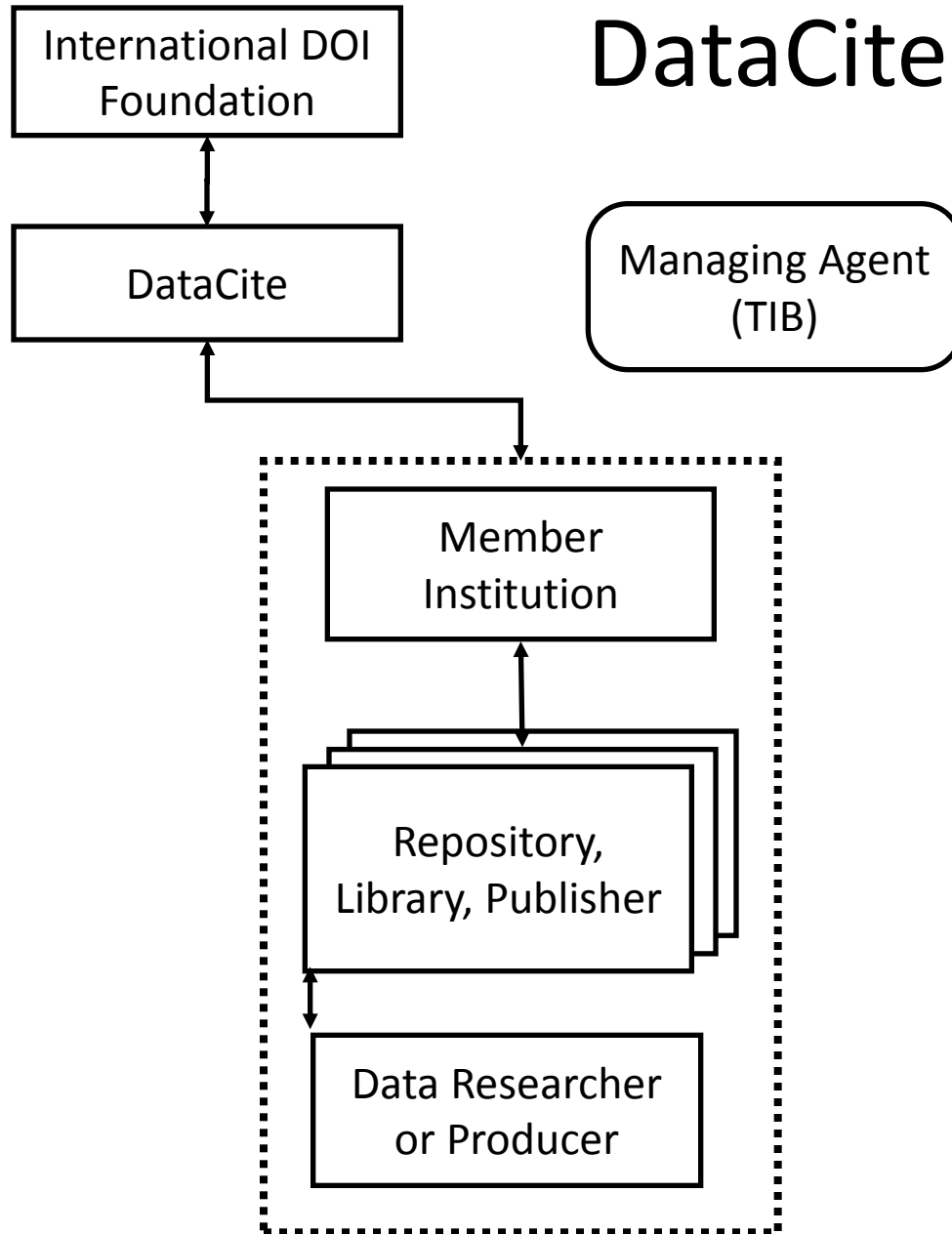
DataCite

German National Library of Economics (ZBW)
German National Library of Science and Technology (TIB)
German National Library of Medicine (ZB MED)
GESIS - Leibniz Institute for the Social Sciences, Germany
Australian National Data Service (ANDS)
ETH Zurich, Switzerland

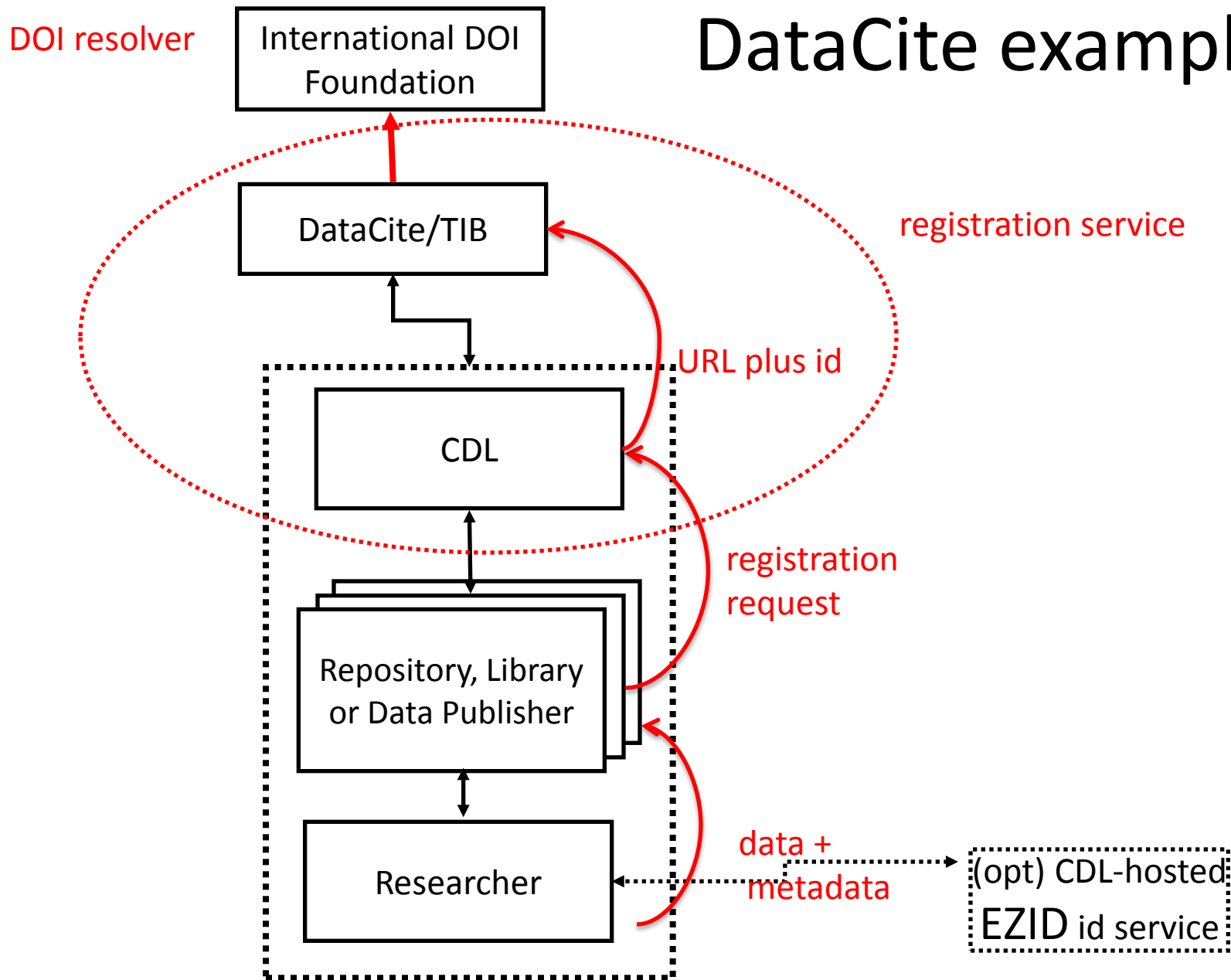


Canada Institute for Scientific and Technical Information (CISTI)
Technical Information Center of Denmark
Institute for Scientific & Technical Information (INIST-CNRS), France
TU Delft Library, The Netherlands
The Swedish National Data Service (SNDS)
The British Library , UK
California Digital Library (CDL), USA
Office of Scientific & Technical Information (OSTI), USA
Purdue University Library, USA

DataCite structure



DataCite example



A life cycle approach

CDL Curation and Publishing Services

<http://www.cdlib.org>

Create, edit, share, and save
data management plans



Open source add-in for Microsoft Excel
as a data collection tool



Create and manage
persistent identifiers



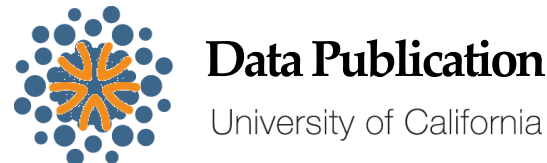
Curation repository:
store, manage, and share research data



Open access scholarly publishing services:
papers, journals, books, seminars & more



An infrastructure to publish and get credit
for sharing research data





- Get identifiers
- Add location
- Add metadata
- Update location
- Update metadata

take control of the management and distribution of your research, share and get credit for it, and build your reputation through its collection and documentation

DataCite Metadata V. 2.2

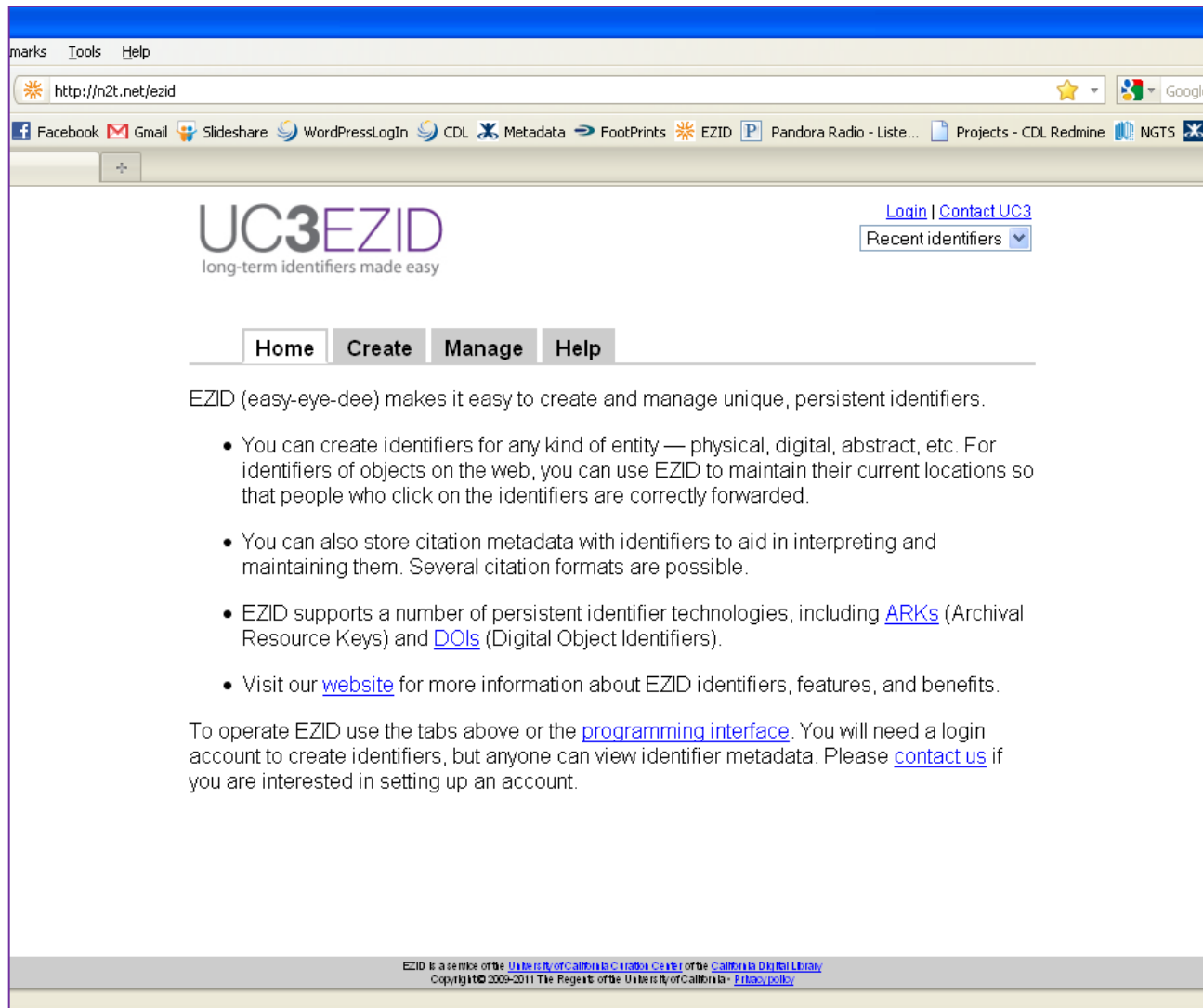
Required properties

1. **Identifier** (with type attribute)
2. **Creator** (with name identifier attributes)
3. **Title** (with optional type attribute)
4. **Publisher**
5. **PublicationYear**

Optional properties

6. **Subject** (with schema attribute)
7. **Contributor** (with type & name identifier attributes)
8. **Date** (with type attribute)
9. **Language**
10. **ResourceType** (with description attribute)
11. **AlternateIdentifier** (with type attribute)
12. **RelatedIdentifier** (with type & relation type attributes)
13. **Size**
14. **Format**
15. **Version**
16. **Rights**
17. **Description** (with type attribute)

http://n2t.net/ezid



The screenshot shows a web browser window with the address bar containing "http://n2t.net/ezid". The browser's toolbar includes icons for Facebook, Gmail, Slideshare, WordPressLogIn, CDL, Metadata, FootPrints, EZID, Pandora Radio, and Projects - CDL Redmine. The website header features the "UC3EZID" logo with the tagline "long-term identifiers made easy". Navigation links for "Login" and "Contact UC3" are present, along with a "Recent identifiers" dropdown menu. A main navigation bar contains buttons for "Home", "Create", "Manage", and "Help". The main content area explains that EZID (easy-eye-dee) makes it easy to create and manage unique, persistent identifiers. It lists four key features: creating identifiers for any entity, storing citation metadata, supporting ARKs and DOIs, and providing a website for more information. A concluding paragraph states that users need a login account to create identifiers but can view metadata without one. The footer contains copyright information for the University of California, 2009-2011, and links to the library and privacy policy.

marks Tools Help

http://n2t.net/ezid

Facebook Gmail Slideshare WordPressLogIn CDL Metadata FootPrints EZID Pandora Radio - Liste... Projects - CDL Redmine NGTS

UC3EZID
long-term identifiers made easy

Login | Contact UC3
Recent identifiers

Home Create Manage Help

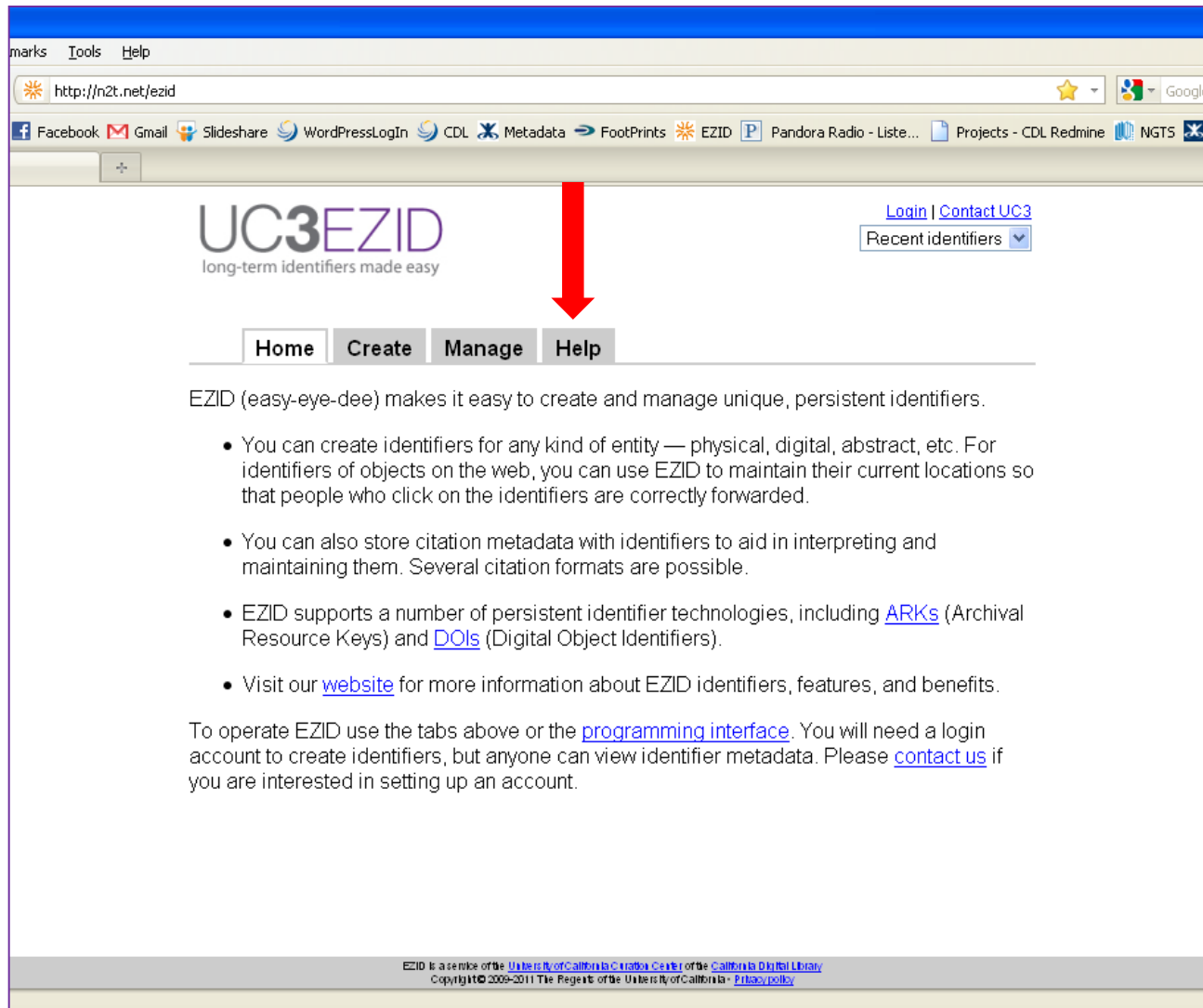
EZID (easy-eye-dee) makes it easy to create and manage unique, persistent identifiers.

- You can create identifiers for any kind of entity — physical, digital, abstract, etc. For identifiers of objects on the web, you can use EZID to maintain their current locations so that people who click on the identifiers are correctly forwarded.
- You can also store citation metadata with identifiers to aid in interpreting and maintaining them. Several citation formats are possible.
- EZID supports a number of persistent identifier technologies, including [ARKs](#) (Archival Resource Keys) and [DOIs](#) (Digital Object Identifiers).
- Visit our [website](#) for more information about EZID identifiers, features, and benefits.

To operate EZID use the tabs above or the [programming interface](#). You will need a login account to create identifiers, but anyone can view identifier metadata. Please [contact us](#) if you are interested in setting up an account.

EZID is a service of the [University of California](#) [Creation Center](#) of the [California Digital Library](#).
Copyright © 2009-2011 The Regents of the University of California • [Privacy policy](#)

http://n2t.net/ezid



The screenshot shows a web browser window with the address bar displaying <http://n2t.net/ezid>. The browser's toolbar includes icons for Facebook, Gmail, Slideshare, WordPressLogIn, CDL, Metadata, FootPrints, EZID, Pandora Radio, and Projects - CDL Redmine. The main content area features the UC3EZID logo with the tagline "long-term identifiers made easy". To the right of the logo are links for "Login | Contact UC3" and a "Recent identifiers" dropdown menu. Below the logo is a navigation menu with tabs for "Home", "Create", "Manage", and "Help". A large red arrow points to the "Help" tab. The main text area contains the following content:

EZID (easy-eye-dee) makes it easy to create and manage unique, persistent identifiers.

- You can create identifiers for any kind of entity — physical, digital, abstract, etc. For identifiers of objects on the web, you can use EZID to maintain their current locations so that people who click on the identifiers are correctly forwarded.
- You can also store citation metadata with identifiers to aid in interpreting and maintaining them. Several citation formats are possible.
- EZID supports a number of persistent identifier technologies, including [ARKs](#) (Archival Resource Keys) and [DOIs](#) (Digital Object Identifiers).
- Visit our [website](#) for more information about EZID identifiers, features, and benefits.

To operate EZID use the tabs above or the [programming interface](#). You will need a login account to create identifiers, but anyone can view identifier metadata. Please [contact us](#) if you are interested in setting up an account.

EZID is a service of the [University of California](#) Center of the [California Digital Library](#).
Copyright © 2009-2011 The Regents of the University of California • [Privacy policy](#)

http://n2t.net/ezid

UC3EZID
long-term identifiers made easy

[Login](#) | [Contact UC3](#)
Recent identifiers ▾

Home **Create** **Manage** **Help**

We hope that most of this interface is easy to use. You can use the form below to create test identifiers exactly as you would under the Create tab. Test identifiers are the same as long-term identifiers except they are deleted after 72 hours.

Clicking the Create button below (leaving the Remainder blank) will generate a preservation-ready test identifier for you.

Namespace	Identifier	
	Prefix	Remainder
<input type="radio"/> ARK Test	ark:/99999/fk4	
<input checked="" type="radio"/> DOI Test	doi:10.5072/FK2	

A namespace is the set of all possible identifiers that begin with a certain prefix, such as ark:/99999/fk4.... EZID always supplies the prefix, and usually the remainder as well. We strongly advise letting EZID generate the identifier for you. This way it will be short, opaque, globally unique, and transcription-safe (EZID adds a "check character").

On the Manage tab, you can add metadata ("data about data") for an identified object. Editable fields change color to yellow as you mouse over them. The "URL" field stores the current location of the identified object. When you first create your identifier, EZID supplies a default value for this field, namely the URL of the Manage tab for that identifier. We recommend that you replace this with the actual current location of the object.

On the right is a pull-down for selecting a "citation profile." The profile determines the metadata elements you can complete for the identifier. Depending on the type of identifier you create, EZID will select the appropriate profile as the default. At present there is no automatic mapping between profiles.

http://n2t.net/ezid

UC3EZID
long-term identifiers made easy

[Login](#) | [Contact UC3](#)

Recent identifiers

Identifier created.

[Home](#) [Create](#) [Manage](#) [Help](#)

Identifier doi:10.5072/FK2PN93HV

URL form <http://dx.doi.org/10.5072/FK2PN93HV> (takes up to 30 minutes for link to work)

Object location...

URL (this page)

About the identified object...

Creator (no value)

Title (no value)

Publisher (no value)

Publication year (no value)

Viewing citation profile

- DataCite
- DataCite
- Dublin Core
- ERC

► *About this identifier...*

http://n2t.net/ezid

UC3EZID
long-term identifiers made easy

[Login](#) | [Contact UC3](#)

Recent identifiers

[Home](#) [Create](#) [Manage](#) [Help](#)

Identifier doi:10.5072/FK2PN93HV

URL form <http://dx.doi.org/10.5072/FK2PN93HV> (takes up to 30 minutes for link to work)

Object location...

URL

About the identified object... Viewing citation profile

Creator

Title

Publisher (no value)

Publication year (no value)


► *About this identifier...*

What this means...

Means Data Set

http://datadryad.org/handle/10255/dryad.1034

Work Reference News



Login

Search Data

Submit Data Now!

My Account

Login
Register

Browse

Authors
Publication Date
Journal Title

Information

Depositing Data
Using Data
Dryad Partners
Archiving Policy
About Dryad
Dryad Blog

Means Data Set

When using this data, please cite the original article:

Passador-Gurgel G, Hsieh W, Hunt P, Deighton N, Gibson G (2007) Quantitative trait transcripts for nicotine resistance in *Drosophila melanogaster*. *Nature Genetics* 39(2):264-268. doi:10.1038/ng1944

Additionally, please cite the Dryad data package:

Passador-Gurgel G, Hsieh W, Hunt P, Deighton N, Gibson G (2007) Data from: Quantitative trait transcripts for nicotine resistance in *Drosophila melanogaster*. Dryad Digital Repository. doi:10.5061/dryad.1030

Cite | Share

Dryad File Identifier doi:10.5061/dryad.1030/4 63 views 54 downloads



Contained in Data Package <http://hdl.handle.net/10255/dryad.1030>

Date Deposited 2009-10-28T19:40:30Z

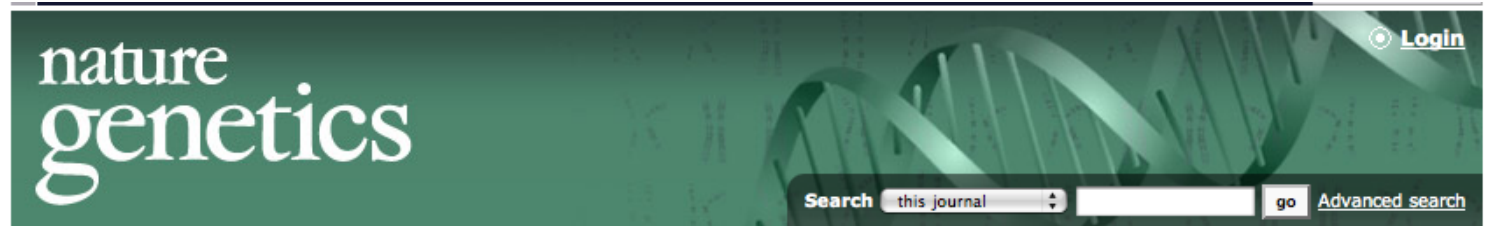
Show Full Metadata

Files in this item

Files	Size	Format	View
Gurgel LSmeans.xls	17.89Mb	Microsoft Excel	View/Open

To the extent possible under law, the authors have waived all copyright and related or neighboring rights to this data.  

What this means...



Access

To read this story in full you will need to login or make a payment (see right).

[nature.com](#) > [Journal home](#) > [Table of Contents](#)

Letter

Nature Genetics **39**, 264 - 268 (2007)

Published online: 21 January 2007 | doi:10.1038/ng1944

Quantitative trait transcripts for nicotine resistance in *Drosophila melanogaster*

Gisele Passador-Gurgel¹, Wen-Ping Hsieh², Priscilla Hunt¹, Nigel Deighton³ & Greg Gibson¹

Although most genetic association studies are performed with the intention of detecting nucleotide polymorphisms that are correlated with a complex trait, transcript abundance should also be expected to associate with diseases or phenotypes. We performed a scan for such quantitative trait transcripts in adult female heads of the fruit fly (*Drosophila melanogaster*) that might explain variation for nicotine resistance. The strongest association was seen for abundance of *ornithine aminotransferase* transcripts, implicating detoxification and neurotransmitter biosynthesis as mediators of the quantitative response to the drug. Subsequently, genetic analysis and metabolite profiling confirmed a complex role for ornithine and GABA levels

ARTICLE LINKS

▶ [Supplementary Info](#)

SEE ALSO

▶ [News and Views by Ruden](#)

ARTICLE TOOLS

- [Send to a friend](#)
- [Export citation](#)
- [Export references](#)
- [Rights and permissions](#)
- [Order commercial reprints](#)
- [Bookmark in Connotea](#)

Personal subscribers to *Nature Genetics* can view this article. To do this, associate your subscription with your registration via the [My Account](#) page. If you already have an active subscription, [login here](#) to your nature.com account.

If you do not have access to the article you require, you can purchase the article (see below) or access it through a [site license](#). Institutions can add additional archived content to their license at any time. [Recommend](#) site license access to your institution.

[Login via your institution](#)

[Login via Athens](#)

Email:

Password:

save your password

[What happens if I save my password](#)

[Forgotten your password](#)

Next Steps

DataCite

- Metadata v. 2.3
- Dublin Core application profile
- Content Service

EZID

- UI redesign
- Automated link checking
- Exposure for citations



For more information

EZID

EZID application: <http://n2t.net/ezid/>

EZID website: <http://www.cdlib.org/services/uc3/ezid/>

DataCite

DataCite Home: <http://datacite.org/>

DataCite Metadata Schema:

<http://schema.datacite.org/meta/kernel-2.2/index.html>

DataCite Metadata Search: <http://search.datacite.org>

Contact EZID Service Mgr: uc3@ucop.edu

Questions?



 by Horia Varlan
<http://www.flickr.com/photos/horiavarlan/4273168957/in/photostream/>