



GUGM 2023

Ex Libris Strategic Roadmap

Guy Ben Porat, VP Academic Discovery and Student Engagement

Today, Tomorrow and the Day After



Looking ahead: 2023 to 2025

PERSONALIZE

Innovate library experiences

OPTIMIZE

Continue to optimize operations



CONNECT

Expand reach and connect communities & institutions



ANALYZE

Generate insights through a global data network



ENGAGE

Introduce new standards for engagement



Free to connect, Free to choose

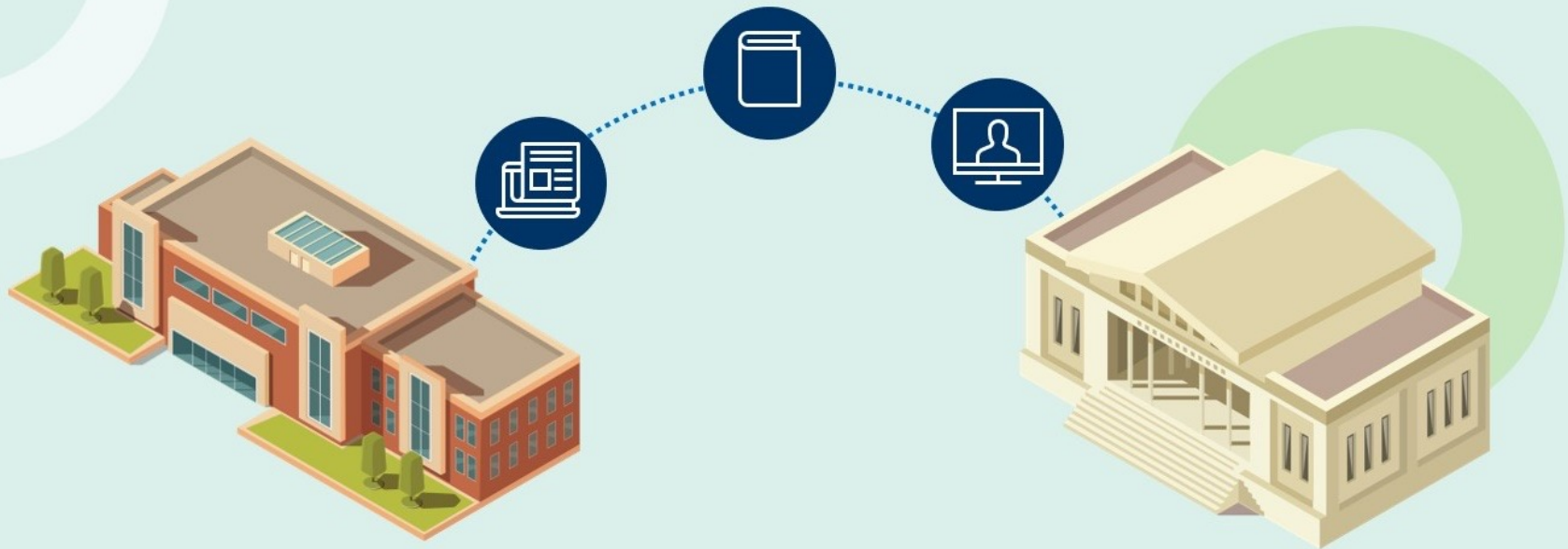
We believe every library needs

Connection



Choices





A World of Connected Products

Streamline End-To-End Workflows



Purchasing decisions based on resource sharing information.

The screenshot displays the Ex Libris Alma OA interface for managing borrowing requests. The main content area shows a list of requests with the following details:

- Request 1:** Kairu [videorecording] • Quill / Created borrowing request. Requested: Book Chapter (Digital). Requester: Staff, Ex Libris. Created: 04/24/2023 01:54:44 PDT. Internal identifier: 201303420000. Level of Service: Rapido Journal Offer. Updated: 04/24/2023 01:55:05 PDT. A callout box highlights a note: "Borrowed 5 Times, Consider purchasing from Rialto".
- Request 2:** Super Indian : Fritz Scholder : 1967-1980 / NGRS INST 02 Inst - law resource sharing library (Community). Requested: Book (Physical). ISBN: 9783791354552. Requester: Staff, Ex Libris. Created: 04/23/2023 02:46:00 PDT. Due date: 04/22/2023. External identifier: 01NGRS0002929. Internal identifier: 201043130000911. Pickup location: No Campus:1234. Level of Service: Rapido Journal Offer. Barcode: x1. Updated: 04/23/2023 03:10:13 PDT.
- Request 3:** Super Indian : Fritz Scholder : 1967-1980 / NGRS INST 02 Inst - law resource sharing library (Community). Requested: Book (Physical). ISBN: 9783791354552. Requester: Staff, Ex Libris. Created: 04/23/2023 02:56:05 PDT. Due date: 04/22/2023. External identifier: 01NGRS0002930. Internal identifier: 201046120000611. Pickup location: No Campus:1234. Level of Service: Rapido Journal Offer. Updated: 04/23/2023 03:09:25 PDT.
- Request 4:** Super Indian : Fritz Scholder : 1967-1980 / NGRS INST 02 Inst - law resource sharing library (Community). Requested: Book (Physical). ISBN: 9783791354552. Requester: Libris. Created: 04/23/2023 02:56:39 PDT. Updated: 04/23/2023 02:56:39 PDT.

The interface includes a left sidebar with navigation options like Admin, Acquisitions, Fulfillment, Discovery, Resources, and Analytics. A top navigation bar shows the current context as 'Resource Sharing Library - Resource Sharing Desk'. A callout box highlights a note: "Borrowed 5 Times, Consider purchasing from Rialto".

Link Data Holistic Approach



End-to-end solution from content, through resource management to end user services.



Scholarly Trusted AI Framework



- AI model trained on scholarly resources
- Collaboration with the community from early stage.
- Pilot with a leading AI Platform





Alma

Workflow Simplification

PO LINE TASK LIST
NOW EARLY ACCESS



Benefits

- Reduction in required clicks for common actions
- “All PO lines” menu link
- No “GO to task list” action
- “Receive” action from the PO line itself
- Multi select facets
- Labels
- Bulk assignments
- Sliding panel to keep the user oriented
- Section customization

The screenshot displays the 'Purchase Order Lines' interface. On the left, there are several filter sections: 'Workflow Step' (In Review), 'Assignment' (Assigned to Me, Unassigned), 'Workflow Step' (In Review), 'PO Line in Claim' (No), 'Alert' (bib record, mandatory info, items already exist), 'Purchase Type' (Digital, Electronic Book), 'Vendor' (AMAZON COM, AMAZON FRANCE, GIFTS), and 'Vendor Account' (Account M). The main table lists 6 PO lines with details like '00 : drawings 2000 at Barbara Gladstone Gallery / text by Klaus Kertess...', '007. Quantum of solace, Los Angeles, CA ; Activision Publishing., c20...', '←, 2014', '0044 / [editor: Peter Murray], Cork ; Crawford Municipal Art Gallery...', and 'Nature [electronic resource], Nature Pub Group, Print began with v. 1...'. The right panel shows a detailed view for PO line 02-4194, including 'PO Line Summary', 'PO Line Information', 'Ordered Items (1)', and 'Ordered Items (1)'. The interface is clean and modern, with a light blue and white color scheme.

Join Noam Fass Alma Acquisitions Update Wednesday 2:30 PM

Workflow Simplification

PATRON SERVICES

The screenshot displays a library patron services interface. On the left, a sidebar shows the user profile for Jane Aulenback (ID 65758397) and navigation options for Loans (43), Returns (78), and Requests. Below this, it shows the user group as BC Undergraduate, with an expiration date of 30/08/2024 and an active status. The active balance is 262.00 USD. System notes indicate 7 overdue items in the library, and user notes indicate 10 overdue items. The main area shows a list of 43 loans, with the first four visible. Each loan entry includes a checkbox, a book cover, the title and author, barcode, loan date, due date, and status (e.g., Lost, Claim returned). It also shows the owning library, call number, item policy, and any associated fines or notes. Action buttons like 'Work Order', 'Renew', and 'Overdue' are present for each item.

< Loans (1-8 of 43) Done

My Institution [Scan Item Barcode] OK [Menu] Create Item Quick Scan

Sort by: Due date Display: All

1	<input type="checkbox"/>		Home / Ifeoma Onyefulu. By Onyefulu, Ifeoma. Barcode 39031032532046 Loan date 01/04/2015 Due date 15/04/2015 22:00:00 PM IDT Lost	Owning library Educational Resource Center Call number GT172 .059 2013 Item policy Null	Overdue Fines (100.00 USD)	Work Order ...
2	<input type="checkbox"/>		George Stubbs / Martin Myrone. By Myrone, Martin. Barcode 39031026947374 Loan date 15/03/2016 Due date 15/03/2017 23:59:00 PM IST Claim returned	Owning library Baptist Call number ND497.S93 M87 2002 Item policy 01	Notes (1) Overdue	Renew ...
3	<input type="checkbox"/>		Specialty law [electronic resource]. Barcode 39031007795529 Loan date 31/08/2021 Last renew date 29/03/2023 Last renew status Cash - Limit exceeded. Due date 31/08/2021 11:12:11 AM IDT Normal	Owning library Law Call number KF3821 .A59 S6 Item policy 2 Hour Loan Description 2006:winter/spring	Notes (1) Overdue	Renew ...
4	<input type="checkbox"/>		Israel / by Michael Michaely. By Michaely, Michael. Barcode CVB201816-10 Loan date 02/03/2017 Last renew date 29/03/2023 Last renew status Cash - Limit exceeded. Due date 27/04/2023 00:00:00 AM IDT	Owning library O'Neill Call number HC497.P2 M53 Item policy 01		Renew ...

Benefits

- Improved navigation
- Visual tips
- Easier management
- **Reduction in required clicks (1-3) for common actions**

Workflow Simplification

REPOSITORY SEARCH

The screenshot displays a library repository search interface. On the left, there are filters for Material Type, Resource Type, Language, Publication Year, and Collection. The main search results list shows four items. The third item, 'Art & antiques', is selected, and its detailed record is shown on the right. The record includes general information, MARC record information, and electronic portfolios.

Search Results:

- 1 **Glamour : a history / Stephen Gundle.**
By Gundle, Stephen, (Oxford ; New York : Oxford University Press, 2008.)
Subject Beauty, Personal--France--History. Beauty, Personal--England--History. Beauty, Personal--Social aspects. and others
MMS ID 99124910900121
ISBN 9780199210985 and others
- 2 **History of Rome / Michael Grant.**
By Grant, Michael, (New York : Scribner's, c1978.)
Subject Rome--History.
MMS ID 99123710800121
ISBN 0684159864
- 3 **Art & antiques**
By Cumming, Robert ([Place of publication not identified] DK Publishing 2005)
Subject Art--Handbooks, manuals, etc
Visual Arts Art, Architecture & Applied Arts and others
Language English
MMS ID 99229793000121
Peer Reviewed
- 4 **Responsible history [electronic resource] / Antoon De Baets.**
By Baets, Antoon de, (New York : Berghahn Books, 2009.)
Subject History--Moral and ethical aspects. Historians--Professional ethics. Electronic books.
MMS ID 99329242600121
ISBN 1-282-62741-4 and others

Record Detail for 'Art & antiques':

General information

Material Type Journal
Record number (OCoLC)51460137
ISSN 0040-0610

MMS ID 99229793000121
Creation Date 26/02/2012 04:39:55 AM IST
Modification Date 10/12/2014 08:07:43 AM IST

MARC Record information

Electronic Portfolios (3)

Collection Name EBSCOhost MasterFILE Premier Interface EBSCOhost, Full text In Deletion Process	Service Type Full Text Portfolio ID 123456789
Collection Name General OneFile (Gale Cengage General OneFile) Interface Galegroup	Service Type Full Text Portfolio ID 123456789
Collection Name Gale World History in Context Interface Galegroup	Service Type Full Text Portfolio ID 123456789

Buttons: View full table, Generate new search

Benefits

- Reduction in required clicks for common actions
- MARC simple view upfront
- New Item Section
- Actionable Inventory Information



Linked Data – Plans for 2023/2024



CATALOGING

Ability to store and use Linked Open Data records

User will be able to use APIs to create and upload LC BIBFRAME work and instance.

It will be possible to manage inventory and perform fulfillment workflows for these instances, as well as discover them in Primo VE.



MARC & Linked Data



CATALOGING

MARC will continue to exist along side Linked Data
MARC can be enriched with LD elements to be utilized
for richer display

MARC 21 Linked Open Data URI enhancements

Catalogers will be able to add URIs in \$\$1, which will then
be searchable in Alma in Real World Object indexes.

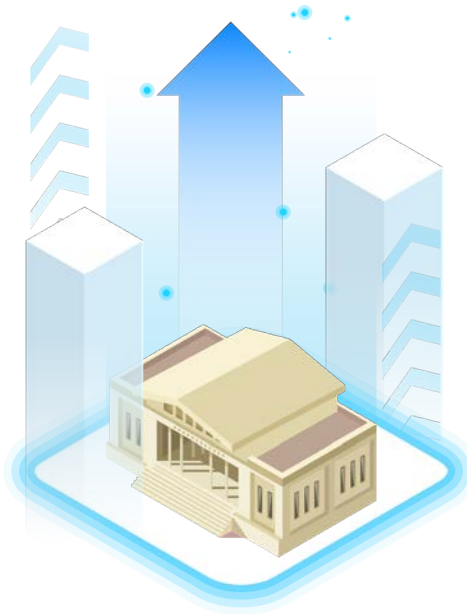
Cataloger URIs (starting with Wikidata) will impact the
data used for creator info-cards displayed to patrons.



Collaborative Collection Management

THE CHALLENGE:

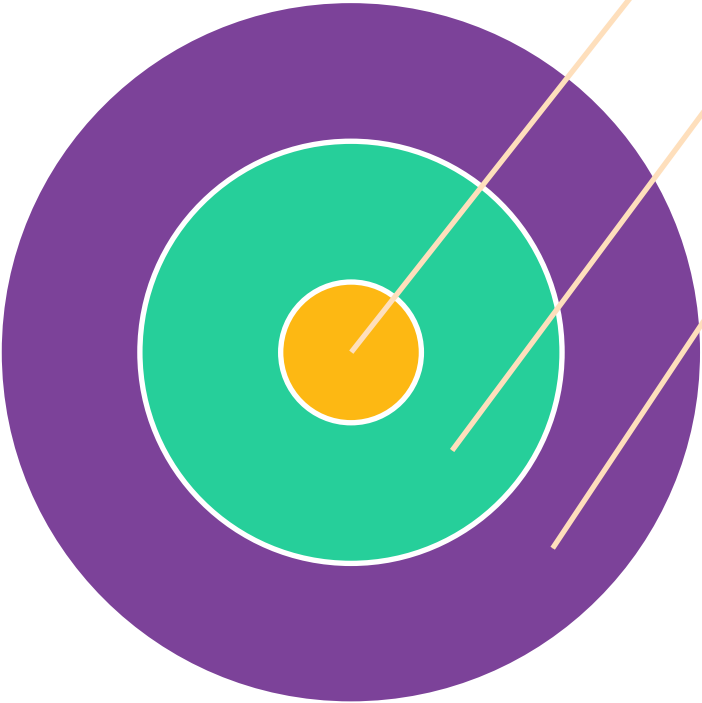
- Shelving space
 - Budget constraints
 - The “long tail”: hard-to-find materials, very useful to few patrons in each library
-
- Consortia:
Central configuration by central office
more centralized operational policies



THE ANSWER:

- Cooperation and Collaboration
- Collection Retention Agreements
 - Joint Acquisition
 - Joint Storage
 - Analytical Management

Levels of Collaboration



Alma Institution

- Renewal
- Expand collection

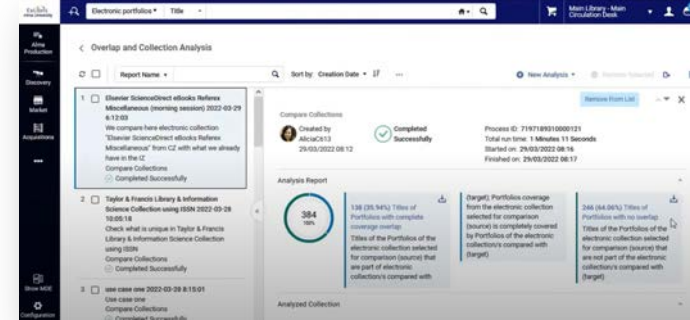
Alma Consortia

- Last copy
- Retention
- Share storage

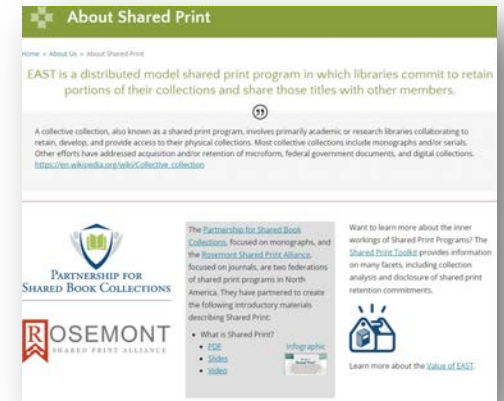
Collaborative Collection

- Resource Sharing
- Retention agreements
- Electronic buying club
- Shared Print

Alma existing Overlap analysis tool



Shared Print initiatives



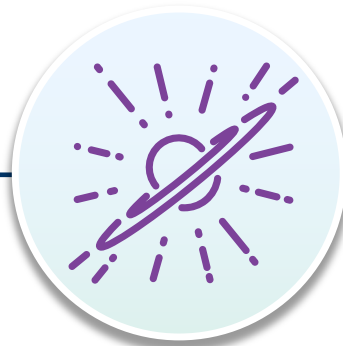
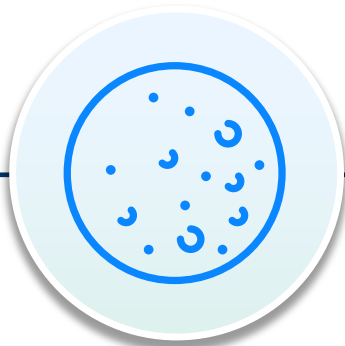


NDE – Next Discovery Experience

Stars are aligning for the Next Discovery Experience

Emerging generative
AI technologies

Updated UX
Development Tool



Expectation for
consumer-like
experience

New Linked Data
practices

Our ways to a new discovery experience



New UX for Primo pages



Linked data experience



Take advantage of new AI tech

Books & More

Historical & Special
Digital Collections

Locate Databases,
Journals & More

Multi-Database
Search

Search for

library fashion

GO

What am I searching?

In North

[Databases A-Z](#)

[Databases by Subject](#)

[New Search](#)

[Advanced Search](#)

Welcome!

[Log In](#)

[Need Help?](#)

[e-Shelf](#)

[Preferences](#)

Results for North

RSS

12 Results, sorted by: popularity

Refine My Results

Format:

> [Books \(8\)](#)

> [eBooks \(5\)](#)

> [Journals/Serials \(4\)](#)

Subject: Topic:

> [Photography, Table-top \(1\)](#)

> [Performing arts \(1\)](#)

> [Literature, Experimental \(1\)](#)

> [Photography \(1\)](#)

> [Fashion photography \(1\)](#)

[Show 5 more](#)

1

[Encyclopedia of clothing and fashion](#) [\(View details\)](#)

Farmington Hills, MI : Charles Scribner's Sons Valerie Steele c2005



Book

Add to e-Shelf

Available at Miami Dade/North Reference (REF GT507 .E53 2005) [\(Get It\)](#)

[Locations](#)



2

[The studio](#), [\(View details\)](#)

New York Time-Life Books. 1971



Book

[There are 2 versions of this item](#)

Add to e-Shelf

Available at Miami Dade/North Circulation (TR550 .T55) [\(Get It\)](#)

[Locations](#)

3

[Shadows](#) [\(View details\)](#)

Charlottesville, Va. : University of Virginia Library ; Boulder, Colo. : NetLibrary NetLibrary, Inc. ; University of Virginia. Library. Electronic Text Center. Djuna Barnes 199-?



eBook

Add to e-Shelf

View online now [\(Get It\)](#)

Local Search Remote Search

timber

Volcano Island University

Search

Advanced Search

Subscribe to Library News feeds



All items that contain my query words anywhere in the record

Show only

Online Resources (36)
Available (884)

Refine My Results

Topic

Timber (335)
Forests and forestry (203)
Forest management (94)
Lumber trade (79)
Forest products industry (66)
Show 15 more

Creator

United States. Forest Service (32)
Timber Research and Development Association (11)
International Tropical Timber Organization (9)
Pacific Northwest Research Station (Portland, Or.) (9)

894 Results for Volcano Island University

Sorted by: Relevance

← Previous 6-15 Next →

Show only Online Resources (36) Available (884)



☆ **A review of fire retardant treatments, fire performance test methods, and building codes in United States of America and Australia, and their influence on the marketing opportunities for forest products**

W. D. Gardner N.S.W. Timber Advisory Council. 1986
Available at Volcano Campus History Library General collection (Quarto TP266.5 .G37x 1986)

Book

Request Locations Details Reviews & Tags Recommendations More



☆ **Timber of West Africa**
Timber Research and Development Association. Bernard Alwyn Jay; Timber Development Association. 1972

Checked out from IN STORAGE General collection (635.51 T4815 1975)

Book

Request Locations Details Reviews & Tags Recommendations More



☆ **Proceedings of the International Symposium on the Use of Home Grown Timber in Building, held in Khartoum, Sudan, 6-8 February, 1979**

Symposium on Use of Home Grown Timber in Building (1979 : Khartoum, Sudan) Omer M. E. Hassan Fageiri; H. O Abd El Nour (Hassan Osman); Jāmi'at al-Kharṭūm. Building & Road Research Institute. 1979?

Book



global warming








Alma University & Central Index



ADVANCED SEARCH

0 selected PAGE 3 21-30 of 421,264 Results Personalize

- 21  BOOK
Global warming and global politics
Paterson, Matthew, 1967-
1996
[Available Online](#)
- 22  BOOK
Global Warming Understanding the Forecast
Archer, David.
2009
[Available Online](#)
- 23  BOOK
Global warming big book
Gombatz, Erika Gasper.
2008
[Available Online](#)
- 24  BOOK
Global warming for dummies
May, Elizabeth.; Caron, Zoë.
c2009
[Available Online](#)
- 25  BOOK
Global warming engineering solutions
Dinçer, İbrahim, 1964-
2009
[Get PDF](#)

Tweak your results

- Expand My Results
- Search in Full Text

Sort by Relevance

Availability

- Available online
- Peer-reviewed Journals
- Open Access
- Held by library

Resource Type

Subject

Creation Date

Author/Creator

Library

Location

Institution

Journal Title

New Records

Language

Search

All (430,123)

Book (43,980)

Articles (12,234)

Newspaper (12,234)

Images (12,234)

Journals (12,234)

Saved Items

Advanced Search

Journals Search

Collections

Peer reviewed

Available online

Held by the library

More Filters

Sort by: Most Relevant

1 BOOK

The evolution of physics from early concepts to relativity and quanta



By Einstein, Albert

Published in 1879-1955.

Available at Lamont Library Gen (PR9199.3.A8 H3 1998)

This look at the near future presents the story of Offred, a Handmaid in the Republic of Gilead, once the United States, an oppressive world where women are no longer allowed...

Read More



Request

2

ARTICLE



PEER REVIEWD



OPEN ACCESS



11 WEB OF SCIENCE



COURSE

Active tactile exploration using a brain—machine— brain interface



By O'DOHERTY, Joseph E

Nature (London), 2011, Vol.479 (7372), p.228-231

Brain-machine interfaces use neuronal activity recorded from the brain to establish direct communication with external actuators, such as prosthetic arms. It is hoped tha...

Read More



Online PDF



Data Quality

Multiple
Identifiers

Ambiguous

How can we make it work ?

Duplication

MARC21

Scale

New Discovery Experience

Search

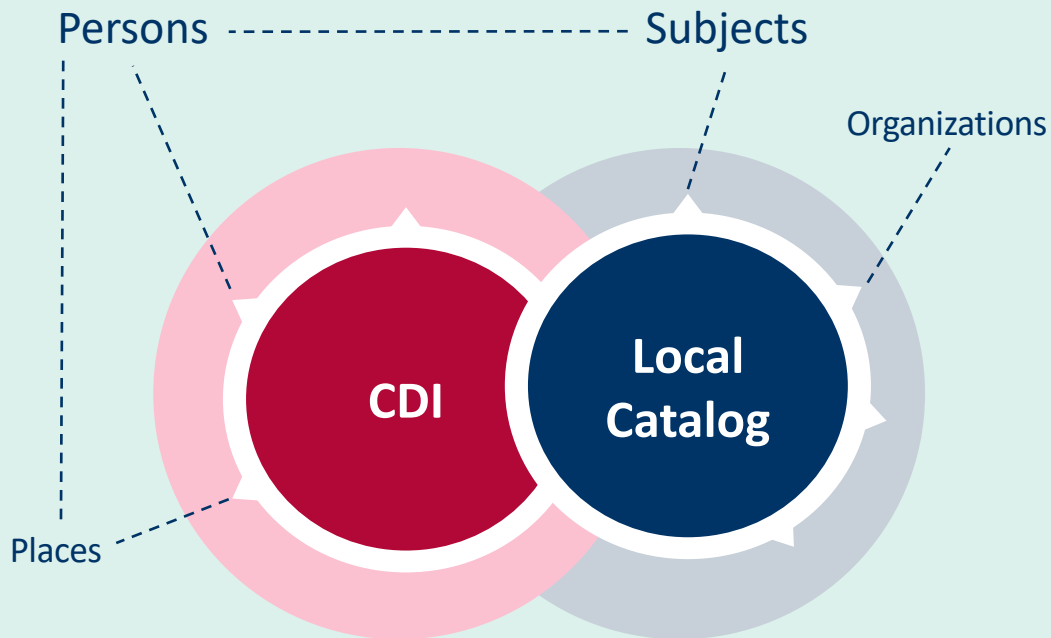
Exploration

Autocomplete

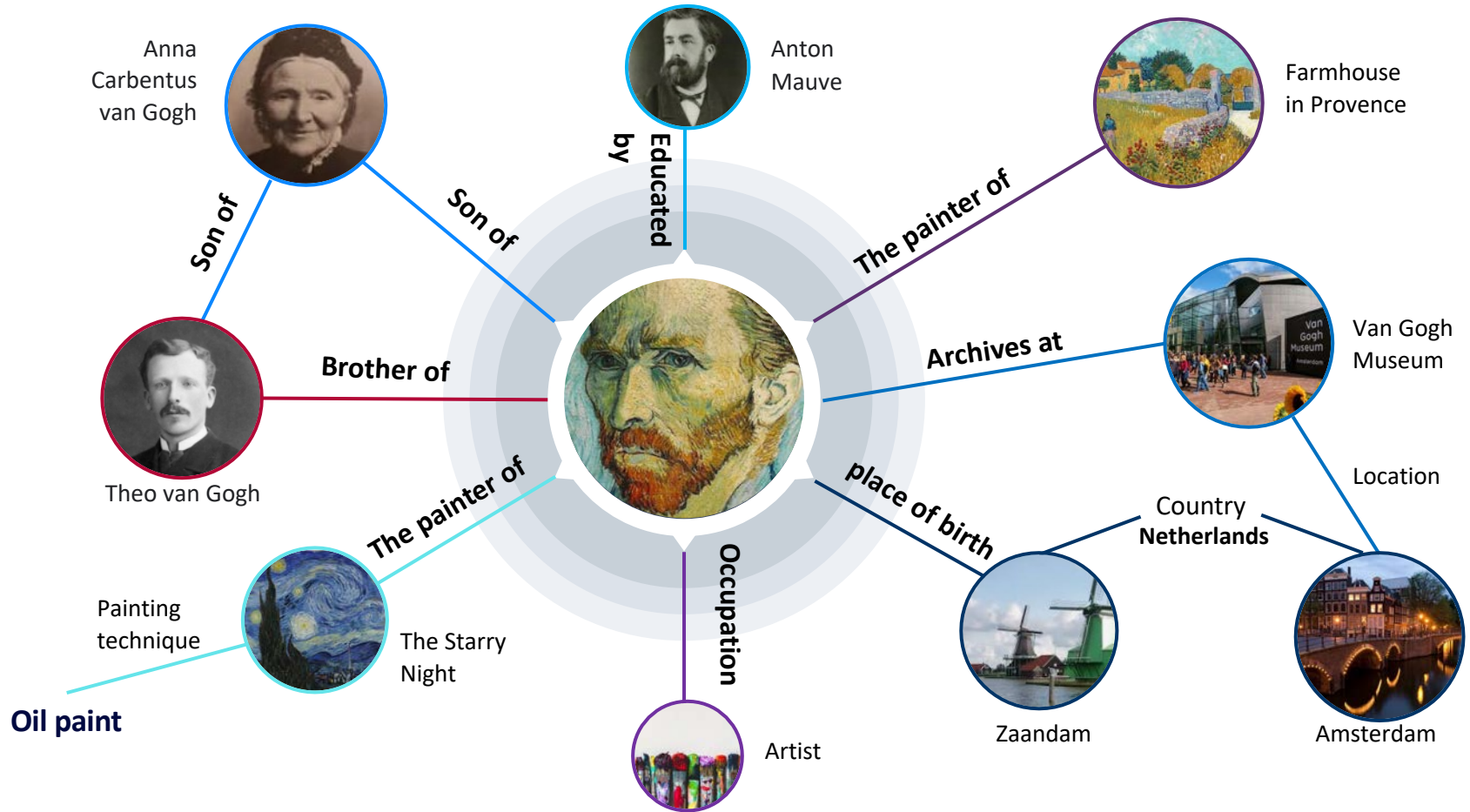
Recommendation

Linking out

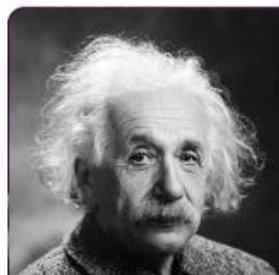
New Linked Data Network



Linked Data Triplets – 2 Entities and their connection type



How will the Discovery Experience leverage from a person entity and its triplets?



Albert Einstein, 1879–1955

Person Information

German-born theoretical physicist; developer of

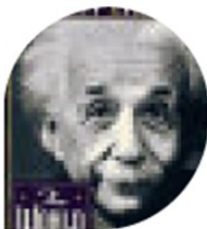
Albert Einstein was a German-born theoretical physicist, widely acknowledged to be one of the greatest physicists of all time. Einstein is known for developing the theory of relativity, but he also made important contributions to the development of the theory of quantum mechanics. Relativity and quantum mechanics are together the two pillars of modern physics. His mass-energy equivalence

Titles written by Albert Einstein



Relativity : the Special & the General Theory

Albert Einstein
1879-1955; Hanoch Gutfreund; Jürgen Renn 1956-



The world as I see it.

Albert Einstein
1879-1955[Abridged ed.]New York



Einstein. Albert

Titles written about Albert Einstein

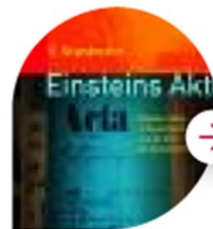


Annus mirabilis :



Albert Einstein : a biography

Albrecht Fölsing 1940
New York : Viking
1997



Einsteins Akte : Einsteins Jahre in Deutschland aus...

Siegfried Grundmann
Berlin : Springer
©1998

Relations:
Person <-> Title
Person <-> Person

Related People



Leopold Infeld

Co-author

"The evolution of physics; the growth of ideas from early concepts to...



Stephen Hawking

Editor

"A stubbornly persistent illusion: the essential scientific works of...



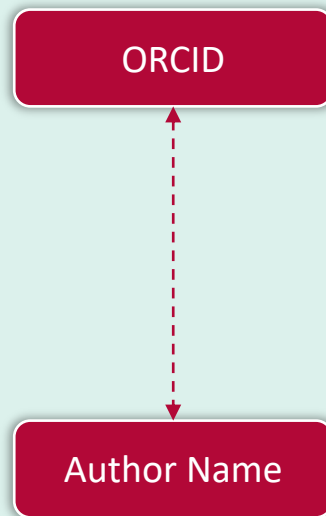
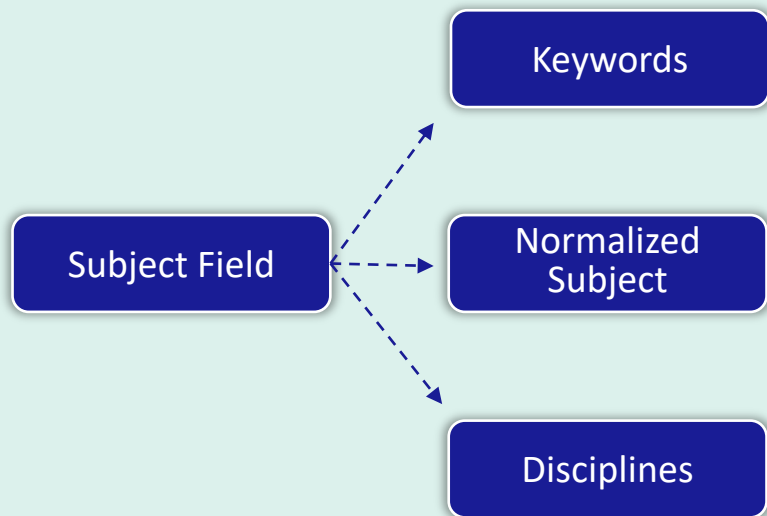
Lise Meitner

Contributor

Feier der 100. Geburtstage von Albert Einstein, Otto Hahn, Lise...



CDI – Data Projects



Getting there

Extract Relations
Person to resources

Abi Library Catalog

Albert Einstein (1879-1955) German-born theoretical physicist, developer of the theory of relativity

Albert Einstein, 1879-1955

German-born theoretical physicist, developer of the theory of relativity.

Albert Einstein was a German-born theoretical physicist, widely acknowledged to be one of the greatest physicists of all time. Einstein is known for developing the theory of relativity, but he also made important contributions to the development of the theory of quantum mechanics. Relativity and quantum mechanics are together the two pillars of modern physics. His mass-energy equivalence formula $E = mc^2$, which arises from relativity theory, has been dubbed "the world's most famous equation". His work is also known for its influence on the philosophy of science. He received the 1921 Nobel Prize in Physics "for his services to theoretical physics, and especially for his discovery of the law of the photoelectric effect", a pivotal step in the development of quantum theory. His intellectual achievements and originality resulted in "Einstein" becoming synonymous with "genius".

Born: March 14, 1879, Ulm, Germany.

Died: April 18, 1955, Princeton, New Jersey, United States

Employer: University of Bern, Swiss Federal Institute of Intellectual Property, University of Zurich, German University in Prague, ETH Zurich, Kaiser Wilhelm Society, Princeton University

Occupation: theoretical physicist, philosopher of science, inventor, science writer, pedagogist

Field of work: theoretical physics

Person Entity

Titles written by Albert Einstein

Relativity: the Special & the General Theory
Albert Einstein

The world as I see it.
Albert Einstein

Einstein, Albert Out of My Late Years
Rogers, Michael

Titles written about Albert Einstein

Annus mirabilis: 1905, Albert Einstein, and the...
John Oliver 1948...

Albert Einstein: a biography
Alberto Filling 1942

Einsteins Akte: Einsteins Jahre in Deutschland und...
Siegfried Struwer...

Extract Relations
Person to Persons

Related People

Leopold Infeld
Co-author
"The evolution of physics; the growth of ideas from early concepts to..."

Stephen Hawking
Editor
"A stability persistent illusion: the essential scientific works of..."

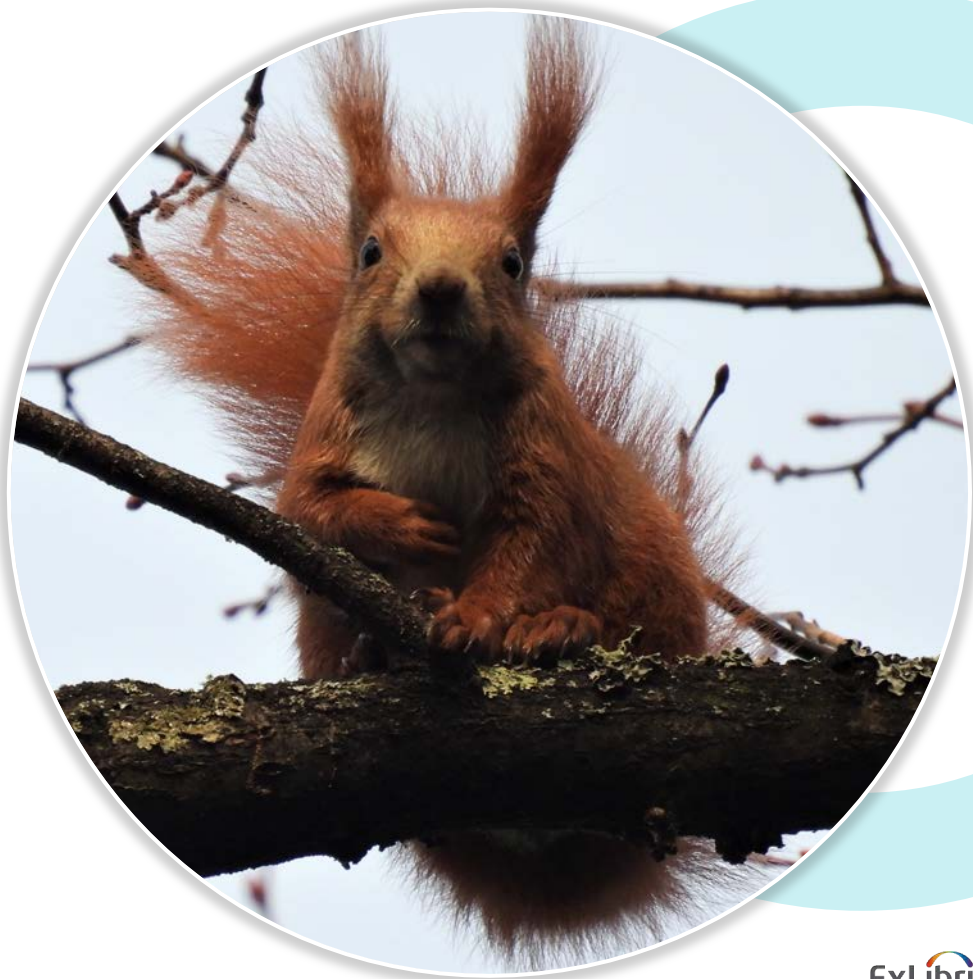
Lise Meitner
Contributor
Feier der 100. Geburtstag von Albert Einstein, Otto Hahn, Lise..."

Subject Entity

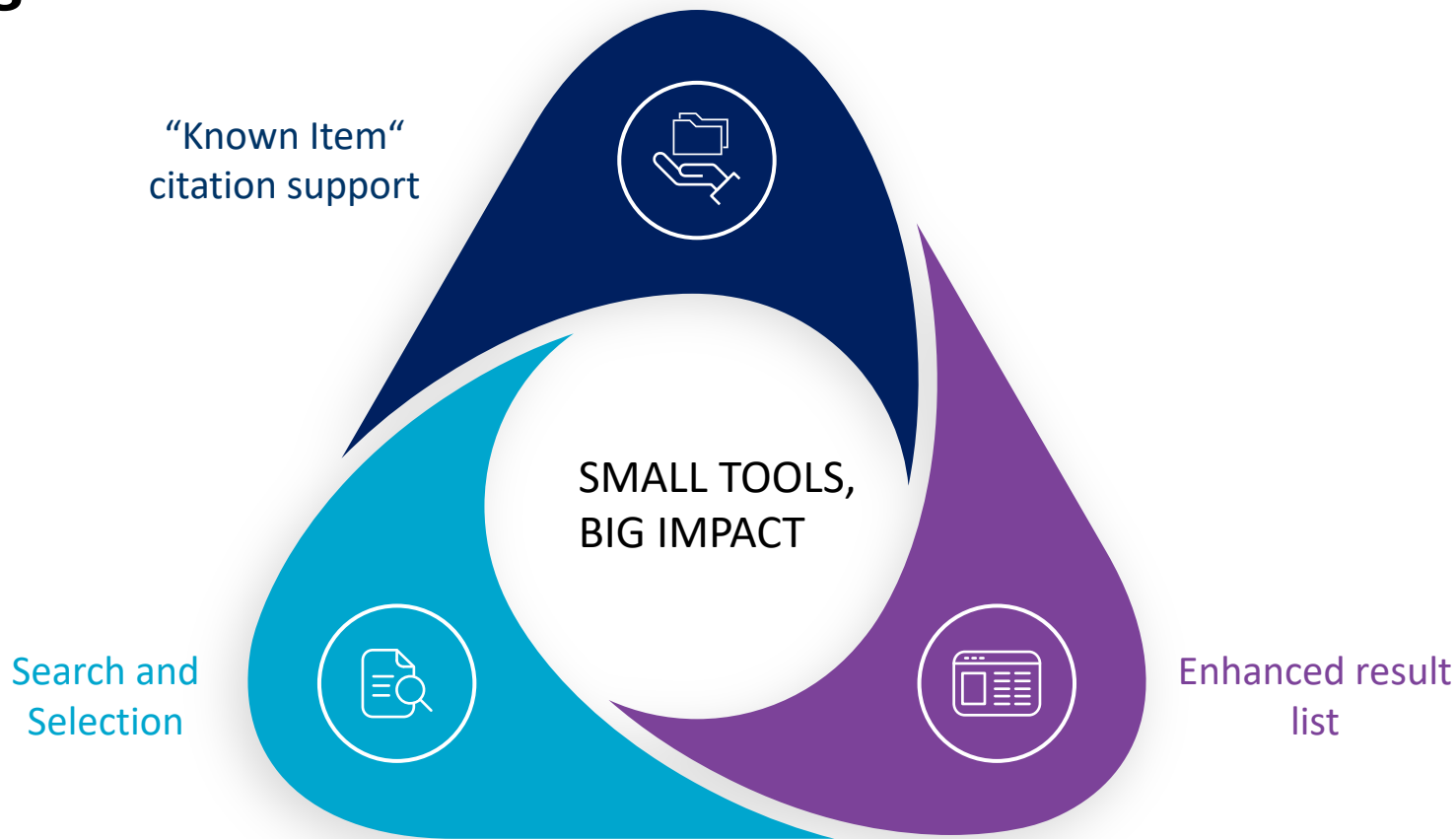
More Relation
Types

ARTIFICIAL ?

Meet your new assistant!



Categories of Services



Sample of Services

1

Natural Language search

Search for material in your own words

2

Translate searches and abstracts on the go

Find material in other languages

3

Full text direct

Provide a citation or ID – get the pdf with one click

4

AI-generated structured work summaries

See important aspects and conclusions of a work at one glance

5

Citation list assistant

Provide a known-item list, get

- An augmented list in a format you want
- Full text pdfs for all available
- A report with the details

AI Seasoning





The main course -
Conversational Discovery
on **trusted scholarly**
collections

Quantum leap for teaching,
learning & research

Conversational Discovery – Concerns

“Not provides facts, making up things”

“not fit with institutional teaching and learning principles”

“bring unintended bias and consequences”

“no proper accreditation”

“generate incorrect information”



Making it work



Welcome to the Next Discovery Experience

Conversational Discovery



🔍 Search in the Library




📍 Library Catalog ▾

Welcome to the Next Discovery Experience

Conversational Discovery



 Ask me anything...



Welcome to the Next Discovery Experience

Conversational Discovery



Tell me about the Honey yield conditions and characteristics of honeys in California |



Tell me about the Honey yield conditions and characteristics of honeys in California

California is known for producing a variety of honeys such as orange blossom, sage, eucalyptus, avocado, and wildflower [1]. The quality criteria for honey are well specified by the European Community Guidelines 2001/110. The main criteria of interest are moisture, electrical conductivity, ash, reducing and nonreducing sugars, free acidity, diastase activity, and hydroxymethylfurfural (HMF) content [2].



See more results at the library site [↗](#)



ARTICLE

Range and Frequency of Africanized Honey Bees in California (USA)

By Kono, Yoshiaki ; Kohn, Joshua R.; Wicker-Thomas, Claude

Online PDF 



ARTICLE

Admixture in Africanized honey bees (*Apis mellifera*) from Panamá...

By Zárate, Daniela ; Lima, Thiago G. ; Poole, Jude D. ; Calfee, Erin ; Burton,...

Request

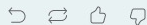
Tell me about the Honey yield conditions and characteristics of honeys in California

California is known for producing a variety of honeys such as orange blossom, sage, eucalyptus, avocado, and wildflower [1] . The quality criteria for honey are well specified by the European Community Guidelines 2001/110. The main criteria of interest are moisture, electrical conductivity, ash, reducing and nonreducing sugars, free acidity, diastase activity, and hydroxymethylfurfural (HMF) content [2] .



Were any studies on the impact of pollen consumption on honey bee (Apis mellifera) digestive physiology and carbohydrate metabolism done in California ?

I found a few studies that might interest you. One study investigated the impact of pollen consumption on honey bee (Apis mellifera) digestive physiology and carbohydrate metabolism [3] [4] . Another study compared the effects of three pollen types on the survival rate, prepupal weight, developmental stage, and pollen digestibility in honey bee (A. mellifera) larvae. A third study compared the effects of eight different mixed-pollen diets on queenless adult survival and physiology [5] .



|

See more results at the library site ↗

ARTICLE [1]



Range and Frequency of Africanized Honey Bees in California (USA)

By Kono, Yoshiaki ; Kohn, Joshua R; Wicker-Thomas, Claude

Online PDF ↗

ARTICLE [2]



Admixture in Africanized honey bees (Apis mellifera) from Panamá...

By Zárate, Daniela ; Lima, Thiago G. ; Poole, Jude D. ; Calfee, Erin ; Burton,...

Request

ARTICLE [3]



The Great Bee Migration: Supply Analysis of Honey Bee Colony Shipments...

By Goodrich, Brittney K ; Williams, Jeffrey C ; Goodhue, Rachael E...

Online PDF ↗

ARTICLE [4]



Genome Sequencing of Museum Specimens Reveals Rapid Changes i...

I found a few studies that might interest you. One study investigated the impact of pollen consumption on honey bee (*Apis mellifera*) digestive physiology and carbohydrate metabolism [3]^P [4]^P. Another study compared the effects of three pollen types on the survival rate, prepupal weight, developmental stage, and pollen digestibility in honey bee (*A. mellifera*) larvae. A third study compared the effects of eight different mixed-pollen diets on queenless adult survival and physiology [5]^P.



What is the research that was done in article [3]^P? Sum up the article for me in under 300 words.

Due to climate variability and the locations of forage sources, there are regional differences in honey production and honey bee colony populations within the U.S. This article suggests a use of Geographically Weighted Regression (GWR) methods over data from 2007-2018 to explain the differences and suggest the shipping costs to Almond pollination are a big factor, while actual pollination costs are not.

Abstract

Over the last two decades, the number of honey bee colonies performing pollination services for the California almond industry has grown steadily and now equals a substantial share of all colonies in the United States. Most US beekeeping operations have not expanded their colony numbers at the current levels of almond pollination fees. Thus, as almond acreage has increased, the marginal supplier of colonies has moved further away from California, increasing interstate shipments. We provide a conceptual representation of the supply and demand of U.S. colonies for almond pollination, and utilize the relatively inelastic demand for colonies to explore spatial elasticities of supply. We combine colony shipment data from 2007 to 2018 provided by the California Department of Food and Agriculture with projected prices from the California State Beekeepers'



ARTICLE

The Great Bee Migration: Supply Analysis of Honey Bee Colony Shipments...

By Goodrich, Brittney K ; Williams, Jeffrey C ; Goodhue, Rachael E...

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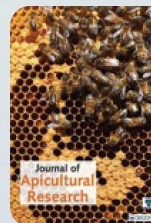


ARTICLE

Genome Sequencing of Museum Specimens Reveals Rapid Changes i...

Cridland, Julie M ; Ramirez, Santiago R ; Dean, Cheryl A ; Scilligo, Amber ;...

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ARTICLE

Preliminary analysis shows that feral and managed honey bees in...

Geffre, Amy ; Travis, Dillon ; Kohn, Joshua ; Nieh, James...

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Our ways to a next discovery experience



New UX for Primo pages



Linked data experience



Take advantage of new AI tech

Thank you!

