



Lifting a veil on the sources of free knowledge through structured bibliographic data

Dario Taraborelli • Daniel Mietchen • Andy Mabbett • Andra Waagmeester

Wikimania 2018 • Cape Town, 21 July 2018



1. Why WikiCite?



Title page from 1609 edition of *Shake-Speares Sonnets*.

Published in 1609, the *Sonnets* were the last of Shakespeare's non-dramatic works to be published. The sequence of the 154 sonnets was composed, but evidence suggests that Shakespeare wrote sonnets in a different order.^[132] Even before the two unauthorised sonnets appeared in *The Passionate Pilgrim* in 1599, Shakespeare's "sugred Sonnets among his private friends".^[133] Few analysts believe that the sonnets were intended to be read in the intended sequence.^[134] He seems to have planned two contrasting series: one about unrequited love (the "dark lady"), and one about conflicted love for a fair young man (the "fair youth"). It is not known if they represent real individuals, or if the authorial "I" who addresses them represents Shakespeare himself. With the sonnets "Shakespeare unlocked his heart".^[135]

The 1609 edition was dedicated to a "Mr. W.H.", credited as "the only begetter" of the poems. It is not known whether this was written by Shakespeare himself or by the publisher, Thomas Thorpe, whose initials appear at the foot of the dedication page; nor is it known who Mr. W.H. was, despite numerous theories, or whether Shakespeare even authorised the publication.^[136] Critics praise the *Sonnets* as a profound meditation on the nature of love, sexual passion, procreation, death, and time.^[137]

 Clear

Hurricane Kirk

On August 22, the National Hurricane Center noted a strong tropical wave moving off the coast of Africa, and began monitoring it for further development.^[117] The wave traveled west-northwestward into the Central Atlantic while slowly becoming more organized. By August 28th, it finally gained sufficient organization to be classified as a tropical depression by the National Hurricane Center.^[118] Later that evening, a satellite pass determined that the depression had strengthened into a tropical storm, and was given the name Kirk at 11 p.m AST (0300 UTC).^[119] Kirk later strengthened into a hurricane on August 30.^[120] It later further intensified into a category 2 hurricane on August 31.^[121] Due to cold SSTs and wind shear, Kirk started to weaken. By September 2nd, Kirk was not expected to "live long and prosper" by the NHC as it began to undergo extratropical transition.^[122] It became a post-tropical cyclone on September 2 at 5:00 p.m. EDT. Kirk's remnants would hit the UK days later, bringing high winds. ^[citation needed]

Category 2 hurricane (SSHWS)



Duration	August 28 – September 2
Peak intensity	105 mph (165 km/h) (1-min) 970 mbar (hPa)

References in Wikipedia

The molecular origins of insulin go at least as far back as the simplest unicellular [[eukaryotes]].<ref name='LeRoith'>{{cite journal | vauthors = LeRoith D, Shiloach J, Heffron R, Rubinovitz C, Tanenbaum R, Roth J | title = Insulin-related material in microbes: similarities and differences from mammalian insulins | journal = Can. J. Biochem. Cell Biol. | volume = 63 | issue = 8 | pages = 839-49 | year = 1985 | pmid = 3933801 | doi = 10.1139/o85-106 }}</ref> Apart from animals, insulin-like proteins are also known to exist in Fungi and Protista kingdoms.

2005

Related projects [\[edit\]](#)

and historical discussion

Over the last six years, there have been a number of proposals for [new Wikimedia projects](#) and for technological changes to Mediawiki that would provide spaces for summaries, metadata, and discussion of references cited in Wikipedia articles and in other Wikimedia projects. These proposals include:

- [Wikicite \(metadata proposal\)](#) - a 2005 proposal to build an "expansion" to Mediawiki that would store and track bibliographic information for citations used in Wikipedia articles
- [Wikicat](#), [Wikicite \(2006 proposal\)](#), and [WikiProject Wikicite](#) - a series of related [new project proposals](#) based on the earlier [Wikicite metadata proposal](#)
- [Wikitextrose](#), a model for capturing citations as they are made on other Projects, and for recording the Type of citations [evidentiary, supporting, refuting, &c], intended for use with the above projects.
- [WikiScholar](#) - a [new project proposal](#) for a [Semantic Mediawiki](#) [based bibliography](#)

Outside of Wikimedia, [AcaWiki](#) [is](#) an active non-Wikimedia CC BY-licensed wiki that hosts summaries of scholarly articles along with metadata on scholarly works. AcaWiki current hosts about 800 summaries from over 100 contributors.

Other related Wikimedia projects whose goals would be served by a new project proving information citations include:

- [Research:Oral Citations](#) - a research project offering a rough proposal for building spaces to discuss oral citations in Wikipedia articles
- ['Fact and Reference Check' \(en:wp\)](#)



[https://meta.wikimedia.org/wiki/Wikicite_\(pre-Wikidata\)](https://meta.wikimedia.org/wiki/Wikicite_(pre-Wikidata))

2018

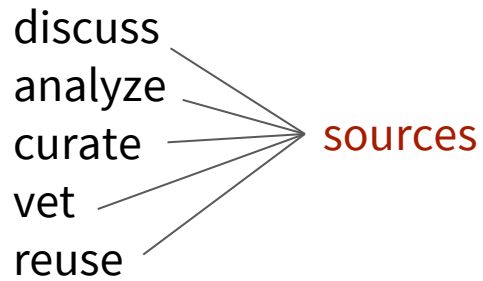


Vision
Technology
Community
Scale
Licensing
Independence

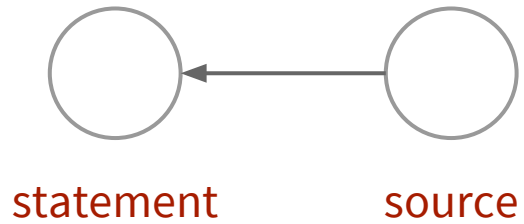


Build a structured repository of sources
to serve as a foundation of free knowledge

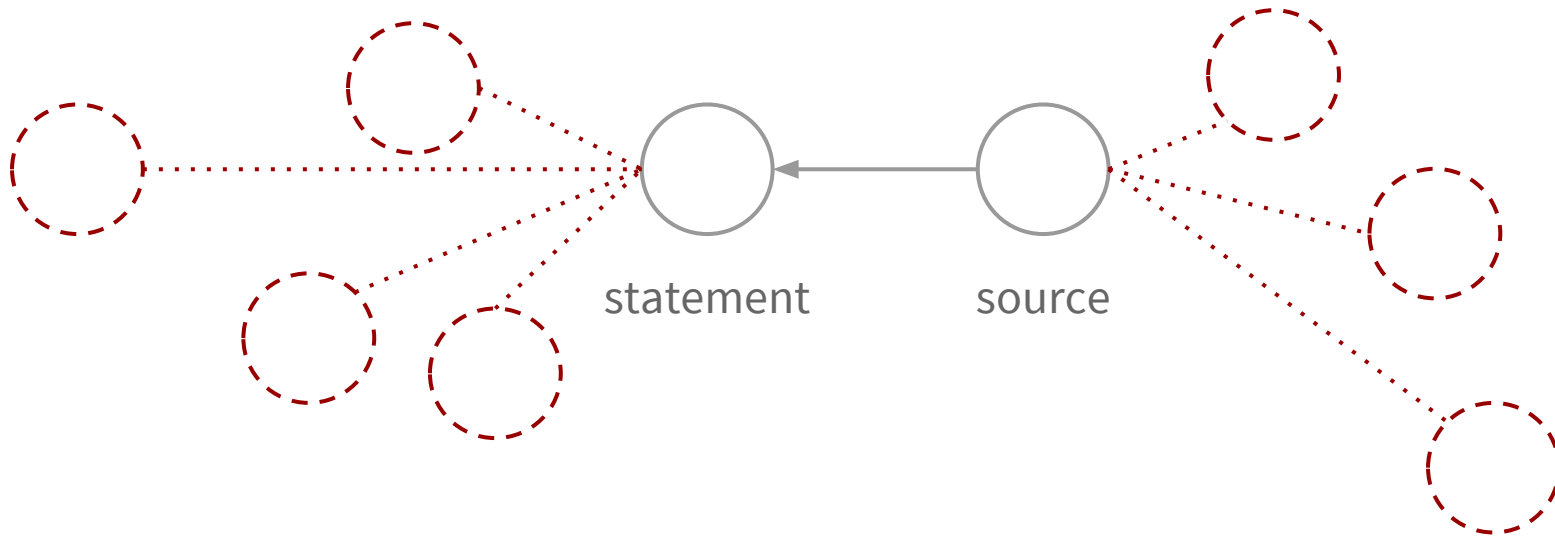
{ } wikicite



{ } wikicite



{ } wikicite



Lifting a veil on the sources of knowledge

Identify statements or sentences:

citing a *New York Times* article

citing journal articles by *physicists at Oxford University in the 1970s*

citing books by *Joseph Stiglitz*

citing a *disputed source*

citing a journal article that was *retracted*

lacking citations from sources in a local language

SOURCE-RELATED SPARQL QUERIES SUPPORTED IN WIKIDATA

meta.wikimedia.org/wiki/WikiCite_2016/Report/Group_5

2. Structured bibliographic data and Wikidata: An introduction

Infoboxes

Marie Skłodowska Curie



c. 1920

Born	Maria Salomea Skłodowska 7 November 1867 Warsaw, Kingdom of Poland , then part of Russian Empire ^[1]
Died	4 July 1934 (aged 66) Passy, Haute-Savoie, France
Cause of death	Aplastic anemia from exposure to radiation
Residence	Poland, France
Citizenship	Poland (by birth) France (by marriage)
Alma mater	University of Paris ESPCI ^[2]

Infoboxes

Marie Skłodowska Curie



c. 1920

Born	Maria Salomea Skłodowska 7 November 1867 Warsaw, Kingdom of Poland , then part of Russian Empire ^[1]
Died	4 July 1934 (aged 66) Passy, Haute-Savoie, France
Cause of death	Aplastic anemia from exposure to radiation
Residence	Poland, France
Citizenship	Poland (by birth) France (by marriage)
Alma mater	University of Paris ESPCI ^[2]

Born	Maria Salomea Skłodowska 7 November 1867 Warsaw, Kingdom of Poland , then part of Russian Empire ^[1]
Died	4 July 1934 (aged 66) Passy, Haute-Savoie, France
Cause of death	Aplastic anemia from exposure to radiation
Residence	Poland, France
Citizenship	Poland (by birth) France (by marriage)
Alma mater	University of Paris ESPCI ^[2]

Infoboxes

Marie Curie



Maria Skłodowska-Curie c. 1900

Información personal

Nombre de nacimiento	Maria Salomea Skłodowska
Nacimiento	7 de noviembre de 1867 Varsovia, Zarato de Polonia
Fallecimiento	4 de julio de 1934 (66 años) Passy, Francia
Causa de la muerte	Anemia aplásica
Lugar de sepultura	Panteón de París

Nombre de nacimiento	Maria Salomea Skłodowska
Nacimiento	7 de noviembre de 1867 Varsovia, Zarato de Polonia
Fallecimiento	4 de julio de 1934 (66 años) Passy, Francia
Causa de la muerte	Anemia aplásica
Lugar de sepultura	Panteón de París

Infoboxes

	居里照，约1920年摄
出生	玛丽亚·萨洛美娅·斯克沃多夫斯卡 Maria Salomea Skłodowska 1867年11月7日 俄罗斯帝国波兰王国华沙 ^{[1]}
逝世	1934年7月4日（66歲） 法国帕西
死因	再生不良性贫血
公民权	波兰（出生） 法国（成婚）
母校	巴黎大学 巴黎高等物理化工学院
知名于	放射性 钋 镭
配偶	皮埃尔·居里（1895年成婚）
儿女	伊雷娜·约里奥-居里 弗雷德里克·约里奥-居里

معلومات شخصية	
الاسم عند الولادة	Maria Salomea Skłodowska
الميلاد	7 نوفمبر 1867 وارسو، فستولا لاند، روسيا (في بولندا حاليا)
الوفاة	4 يوليو 1934 (66 سنة) باسي، باريس، فرنسا
سبب الوفاة	فقر الدم اللاتنسجي ^{[1]}
مكان الدفن	مقبرة العظام
الإقامة	باريس
مواطنة	روسية (بموجب تبعية بولندا) لإمبراطورية الروسية)
الجنسية	بولندية، ثم فرنسية فيما بعد
العرق	بولنديون
الديانة	مُحددة
عضوة في	الأكاديمية الملكية السويدية للعلوم، والأكاديمية الروسية للعلوم، والأكاديمية الوطنية للطب
الزوج	بيار كوري (1895-1906)
أبناء	إيرين جوليو-كوري، وإيف كوري

জন্ম	নভেম্বর ৭ ১৮৬৭ ওয়ারশ, কংগ্রেস পোল্যান্ড
মৃত্যু	জুলাই ৪, ১৯৩৪ (৬৬ বছর) Sancellemoz, ফ্রান্স
জাতীয়তা	পোলীয়, ফরাসি
কর্মক্ষেত্র	পদার্থবিজ্ঞান এবং রসায়ন
প্রতিষ্ঠান	সরবোন
প্রাক্তন ছাত্র	সরবোন এবং ইএসপিসিআই
পিএইচডি উপদেষ্টা	আঁরি বেকেরেল
পিএইচডি ছাত্ররা	অঁদ্রে-লুই দ্যবিয়েঁ Marguerite Catherine Perey
পরিচিতির কারণ	তেজস্ক্রিয়তা
উল্লেখযোগ্য পুরস্কার	 পদার্থবিজ্ঞানে নোবেল পুরস্কার (১৯০৩) রসায়নে নোবেল পুরস্কার (১৯১১)

Wikidata



The image shows a vertical screenshot of the Wikidata interface. It displays a list of items, each with a label in a specific language and a description in English. The items are organized into a table-like structure with columns for the item ID, the label, and the description. The interface includes a search bar at the top and a sidebar on the left with navigation options.

Item ID	Label	Description
Q1	Q1	Q1
Q2	Q2	Q2
Q3	Q3	Q3
Q4	Q4	Q4
Q5	Q5	Q5
Q6	Q6	Q6
Q7	Q7	Q7
Q8	Q8	Q8
Q9	Q9	Q9
Q10	Q10	Q10
Q11	Q11	Q11
Q12	Q12	Q12
Q13	Q13	Q13
Q14	Q14	Q14
Q15	Q15	Q15
Q16	Q16	Q16
Q17	Q17	Q17
Q18	Q18	Q18
Q19	Q19	Q19
Q20	Q20	Q20
Q21	Q21	Q21
Q22	Q22	Q22
Q23	Q23	Q23
Q24	Q24	Q24
Q25	Q25	Q25
Q26	Q26	Q26
Q27	Q27	Q27
Q28	Q28	Q28
Q29	Q29	Q29
Q30	Q30	Q30
Q31	Q31	Q31
Q32	Q32	Q32
Q33	Q33	Q33
Q34	Q34	Q34
Q35	Q35	Q35
Q36	Q36	Q36
Q37	Q37	Q37
Q38	Q38	Q38
Q39	Q39	Q39
Q40	Q40	Q40
Q41	Q41	Q41
Q42	Q42	Q42
Q43	Q43	Q43
Q44	Q44	Q44
Q45	Q45	Q45
Q46	Q46	Q46
Q47	Q47	Q47
Q48	Q48	Q48
Q49	Q49	Q49
Q50	Q50	Q50
Q51	Q51	Q51
Q52	Q52	Q52
Q53	Q53	Q53
Q54	Q54	Q54
Q55	Q55	Q55
Q56	Q56	Q56
Q57	Q57	Q57
Q58	Q58	Q58
Q59	Q59	Q59
Q60	Q60	Q60
Q61	Q61	Q61
Q62	Q62	Q62
Q63	Q63	Q63
Q64	Q64	Q64
Q65	Q65	Q65
Q66	Q66	Q66
Q67	Q67	Q67
Q68	Q68	Q68
Q69	Q69	Q69
Q70	Q70	Q70
Q71	Q71	Q71
Q72	Q72	Q72
Q73	Q73	Q73
Q74	Q74	Q74
Q75	Q75	Q75
Q76	Q76	Q76
Q77	Q77	Q77
Q78	Q78	Q78
Q79	Q79	Q79
Q80	Q80	Q80
Q81	Q81	Q81
Q82	Q82	Q82
Q83	Q83	Q83
Q84	Q84	Q84
Q85	Q85	Q85
Q86	Q86	Q86
Q87	Q87	Q87
Q88	Q88	Q88
Q89	Q89	Q89
Q90	Q90	Q90
Q91	Q91	Q91
Q92	Q92	Q92
Q93	Q93	Q93
Q94	Q94	Q94
Q95	Q95	Q95
Q96	Q96	Q96
Q97	Q97	Q97
Q98	Q98	Q98
Q99	Q99	Q99
Q100	Q100	Q100



[Main page](#)
[Community portal](#)
[Project chat](#)
[Create a new item](#)
[Recent changes](#)
[Random item](#)
[Query Service](#)
[Nearby](#)
[Help](#)
[Donate](#)

Tools

[What links here](#)
[Related changes](#)
[Special pages](#)
[Permanent link](#)
[Page information](#)
[Concept URI](#)
[Cite this page](#)

[English](#) [Not logged in](#) [Talk](#) [Contributions](#) [Create account](#) [Log in](#)

Item [Discussion](#)

Read

[View history](#)



Marie Curie (Q7186)

French-Polish physicist and chemist

[edit](#)

[Maria Salomea Skłodowska](#) | [Maria Skłodowska-Curie](#) | [M. Curie](#)

[► In more languages](#)

Statements

instance of



human

[edit](#)

[► 1 reference](#)

[+ add value](#)

part of



[Pierre and Marie Curie](#)

[edit](#)

[► 1 reference](#)

[+ add value](#)

Marie Curie (Q7186)

French-Polish physicist and chemist

Maria Salomea Skłodowska | Maria Skłodowska-Curie | M. Curie

[▶ In more languages](#)

Statements

instance of	human	 edit
	▶ 1 reference	
	+ add value	

date of birth	7 November 1867 <i>Gregorian</i>	 edit
	▶ 6 references	
	+ add value	

Multilingual labels, descriptions, aliases

#	Label	Description	Alias
af	Marie Curie		
am	ማሪ ኩሪ		
an	Marie Curie	Marie Curie	
ar	ماري كوري	عالمة كيمياء بولندية	
arz	مارى كورى		
as	মেডাম কুৰী		
ast	Marie Curie	química y física polaco-francesa	Maria Salomea Skłodowska Marie Skłodowska-Curie
ay	Marie Curie		
az	Mariya Küri		
azb	ماريا كورى		
ba	Мария Склодовская- Кюри		
be	Марія Склядовская- Кюры		

Statements (& references)

Statements

instance of

 human  edit

▼ 1 reference

stated in

data.bnf.fr

retrieved

10 October 2015

reference URL

<http://data.bnf.fr/ark:/12148/cb121447141>

+ add reference

+ add value

Statements with qualifiers; data types

country of citizenship	 	France	
		start time	1895
		▶ 1 reference	
	 	Poland	
		start time	1918
		▶ 3 references	

name in native language	 	Marie Curie (French)	
		▼ 0 references	
	 	Maria Skłodowska-Curie (Polish)	

Identifiers

Identifiers

Mathematics Genealogy
Project ID



177944

▼ 0 references

VIAF ID



76353174

▼ 0 references

Properties

VIAF ID (P214)

identifier in the Virtual International Authority File. Format: up to 22 digits

VIAF | VIAF identifier | Virtual International Authority File

► [In more languages](#)

Data type

External identifier

Statements

instance of



Wikidata property for authority control, with reciprocal use of
Wikidata

 [edit](#)

Types of content in Wikidata

- People
- Places
- Taxa
- Buildings
- Organisations
- Artworks
- Events
- Astronomical Bodies
- Chemicals
- Processes
- Theorems
- Concepts
- **Works**
- **Journals**
- **Publishers**
- Meta-items

Scholarly papers

(DOI: 10.7717/PEERJ.5000, [Q55282868](#))

cites	 Estimation of pairwise relatedness with molecular markers.  edit
	▶ 1 reference
	 Median-joining networks for inferring intraspecific phylogenies  edit
	▶ 1 reference
	 Basic local alignment search tool  edit
	▶ 1 reference
+ add value	

+ add statement

Identifiers

PubMed ID	 29915704  edit
	▶ 1 reference
+ add value	

DOI	 10.7717/PEERJ.5000  edit
-----	---

Authors

([Q42544799](#))

Zodwa Dlamini (Q42544799)

South African biochemist

▼ [In more languages](#) [Configure](#)

Language	Label	Description
English	Zodwa Dlamini	South African biochemist

Identifiers

ORCID iD



[0000-0002-8012-3646](#)

Free to use (public domain/ CC0 licence)

- SPARQL
- API
- Data URIs
 - <http://www.wikidata.org/entity/Q7186>
- Data dumps
 - Full or incremental

Template:Cite Q

(https://en.wikipedia.org/wiki/Template:Cite_Q)

{{Cite Q |Q15625490}}

Jeffrey T. Williams; [Kent E. Carpenter](#); James L. Van Tassell; Paul Hoetjes; Wes Toller; Peter Etnoyer; Michael Smith (21 May 2010), "[Biodiversity Assessment of the Fishes of Saba Bank Atoll, Netherlands Antilles](#)"[↗], *PLoS ONE*, **5** (5), [doi:10.1371/JOURNAL.PONE.0010676](#)[↗], [PMC 2873961](#) [↗], [PMID 20505760](#)[↗], [Wikidata Q15625490](#)

Template:Cite Q

(https://en.wikipedia.org/wiki/Template:Cite_Q)

{{Cite Q |Q15625490 |page=42
|access-date=18 May 2017
|quote=lorem ipsum}}

Jeffrey T. Williams; [Kent E. Carpenter](#); James L. Van Tassell; Paul Hoetjes; Wes Toller; Peter Etnoyer; Michael Smith (21 May 2010), "[Biodiversity Assessment of the Fishes of Saba Bank Atoll, Netherlands Antilles](#)"[↗], *PLoS ONE*, **5** (5): 42, [doi:10.1371/JOURNAL.PONE.0010676](#)[↗], [PMC 2873961](#) [↗], [PMID 20505760](#)[↗], retrieved 18 May 2017, "lorem ipsum", [Wikidata Q15625490](#)

ORCIDator

(<https://tools.wmflabs.org/sourcemd/orcidator.php>)

ORCIDator

Tools Git Talk



Input list

Q50310712

Add authors to publications by creating new items, and adding to existing authors where possible (list: one Wikidata publication item per row)

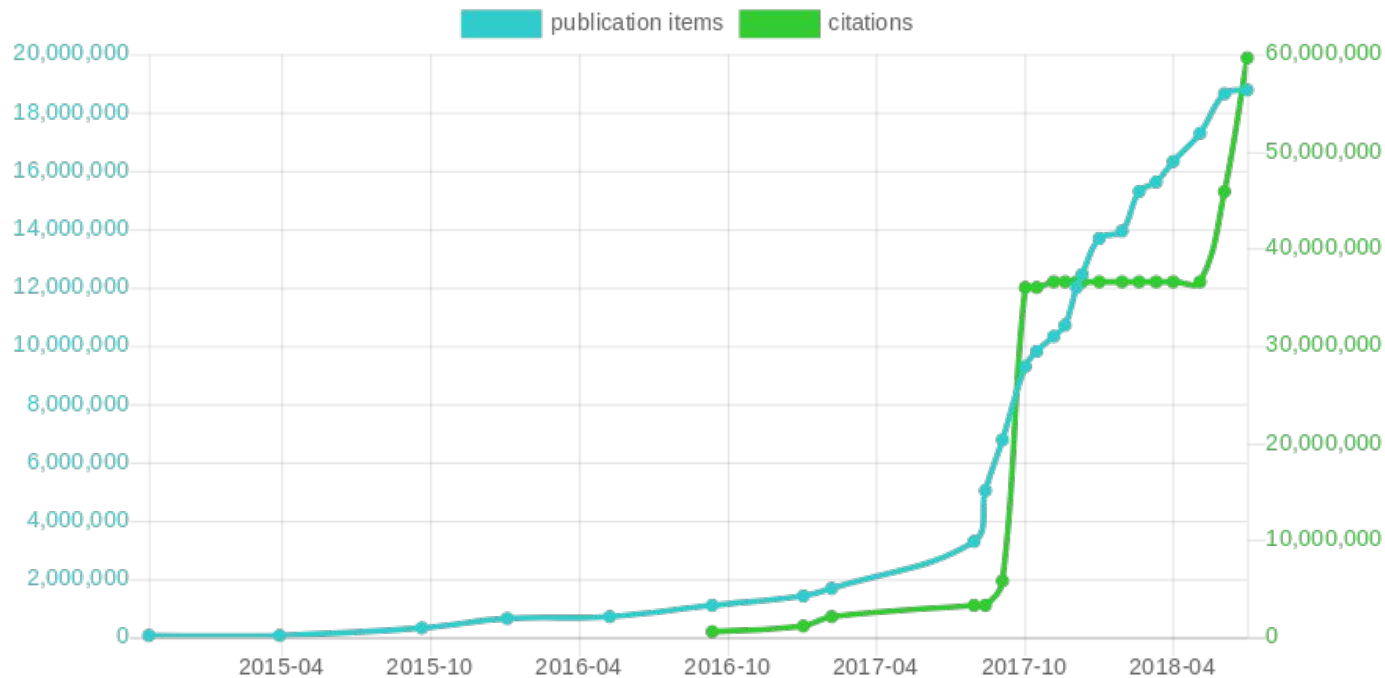
Add metadata from ORCID authors to Wikidata (list: one Wikidata author item per row)

Create/amend papers for ORCID authors *slow!* (list: one Wikidata author item per row)

3. WikiCite: Where we are today

A growing database of sources stored as Wikidata items

19 million items, 38% of all Wikidata



An extensive list of bibliographical properties

On the origin of species (Q20124)

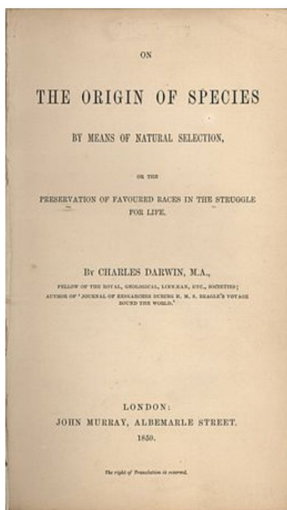
[edit label](#)

On the origin of species by means of natural selection, or, The preservation of favoured races in the struggle for life |
The origin of species | " On the Origin of Species "

book by Charles Darwin

instance of: On the origin of species is a(n) [academic work](#), [book](#)

Statements		
	Own statements	
From related entities		
publisher	John Murray (English publisher)	
author	Charles Darwin (British naturalist, author of "On the origin of species, by means of natural selection")	
number of pages	502	
genre	scientific literature	
	biology (study of life)	
original language of work	English (West Germanic language originating in England)	
edition(s)	On the Origin of Species (1859) (1st edition)	
	The Origin of Species (1872)	
	Q24073728 language of work or name : Russian (Slavic language)	
publication date	1859-11-24	
title	On the Origin of Species by Means of Natural Selection, or the Preservation of Favoured Races in the Struggle for Life [en]	
language of work or name	English (West Germanic language originating in England)	



Links

[Wikidata page](#)[Official website](#)[Wikipedia article](#)[Reasonator](#)

Identifiers

ON THE ORIGIN OF SPECIES • <https://www.wikidata.org/wiki/Q20124>

Annotations about entities cited in creative works

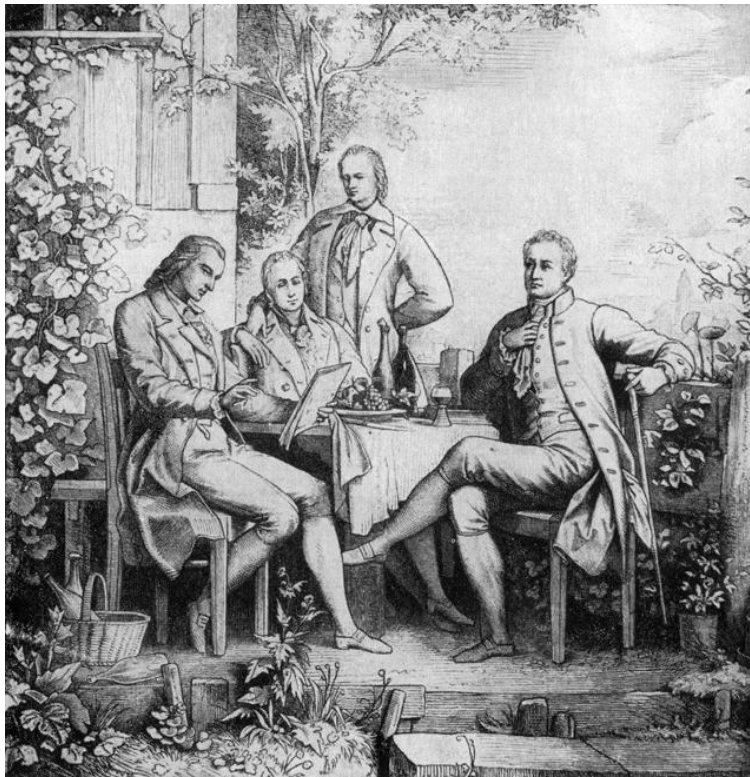
From Chapter V:

The elder Geoffroy and Goethe propounded, at about the same period, their law of compensation or balance-ment of growth; or, as Goethe expressed it, “in order to spend on one side, nature is forced to economise on the other side.” I think this holds true to a certain ex-

From Chapter XI:

species belonging to European genera occur. On the highest mountains of Brazil, some few European genera were found by Gardner, which do not exist in the wide intervening hot countries. So on the Silla of Caraccas the illustrious Humboldt long ago found species belong-

Flashback to the [WikidataCon opening keynote](#)



- The image [depicts](#)
[Q22670](#) (Friedrich Schiller)

[Q77888](#) (Wilhelm von Humboldt)

[Q6694](#) (Alexander von Humboldt)

[Q5879](#) (Johann Wolfgang von Goethe)

- They are all authors ([P50](#)) of multiple works.
- Darwin cites ([P2860](#)) two of them.
- We don't have a text equivalent of "depicts".

(Adolph Müller; ca. 1797; Scene is in [Q2235783](#) in Jena)

Usage of some key bibliographic properties

(% growth since WikidataCon 2017 – October 2017)

author (P50)	<u>2,628,616</u> (+200%)
--------------	--

author name string (P2093)	<u>75,556,563</u> (+90%)
----------------------------	--

ISBN-13 (P212) <i>often used for book editions</i>	<u>36,260</u> (+21%)
--	--------------------------------------

DOI (P356) <i>often used for journal articles</i>	<u>6,895,447</u> (+90%)
---	---

main subject (P921)	<u>2,592,073</u> (+500%)
---------------------	--

All PubMed / PubMed Central citations in Wikipedia

half a million **sources cited on the English Wikipedia** using a **PubMed or PubMed Central** identifier are now available as Wikidata entries

5. [^] [Penicillin at the Free Dictionary](#)
6. [^] Garrod, L. P. (1960). "Relative Antibacterial Activity of Three Penicillins". *British Medical Journal*. **1** (5172): 527–29. doi:10.1136/bmj.1.5172.527
7. [^] Garrod, L. P. (1960). "The Relative Antibacterial Activity of Four Penicillins". *British Medical Journal*. **2** (5214): 1695–6. doi:10.1136/bmj.2.5214.1695. PMC 2098302. PMID 13703756.
8. [^] "Penicillin G and Penicillin V". *livertox.nih.gov*. Retrieved 2016-09-25.
9. [^] "Penicillin (Benzylpenicillin, Penicillin G, Bicillin C-R/L-A, Pfizerpen, Wycellin)". *The Antimicrobial Index*. Knowledgebase. Retrieved 4 March 2014.
10. [^] "Penicillin G sodium salt Susceptibility and Resistance Data" (PDF). TOKU-E. Retrieved 4 March 2014.
11. [^] ^a ^b ^c Rossi S, ed. (2006). *Australian Medicines Handbook*. Adelaide: Australian Medicines Handbook. ISBN 0-9757919-2-3.

Broad coverage of scholarly journals



Web of Science currently includes 32,840 scholarly journals –@habib #force2017



3:30 AM - 25 Oct 2017



There are now 42,650 items about scholarly journals in @wikidata, up +80% since last year.

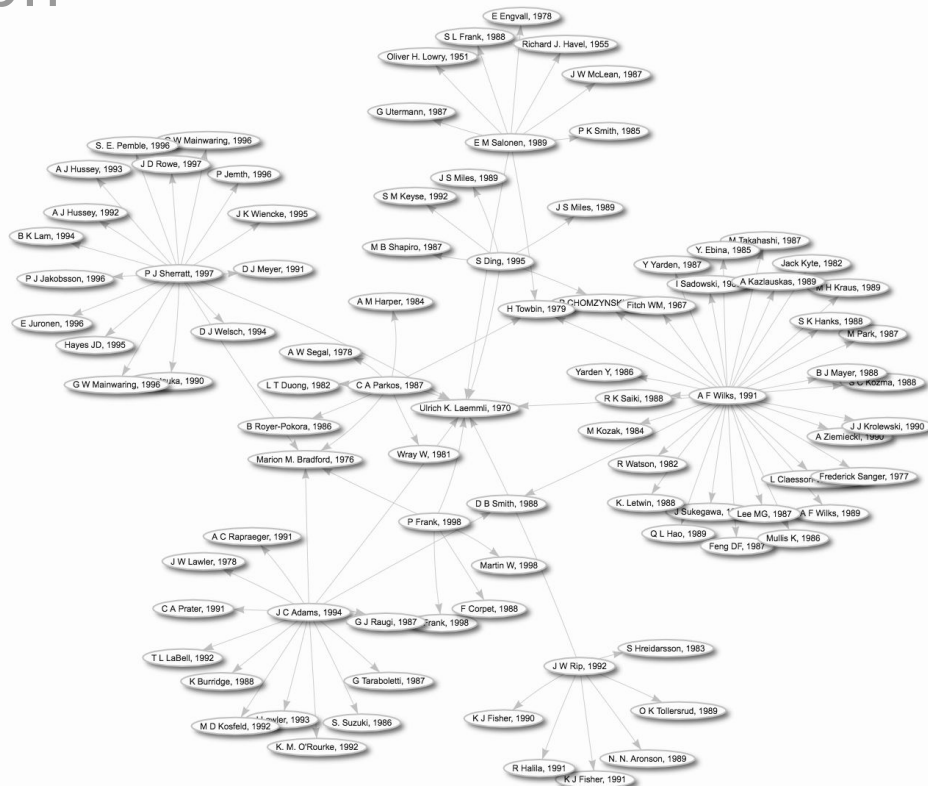
<https://twitter.com/Wikicite/status/923134697680629760>

<https://twitter.com/Wikicite/status/921520882392088576>

The Wikidata citation graph

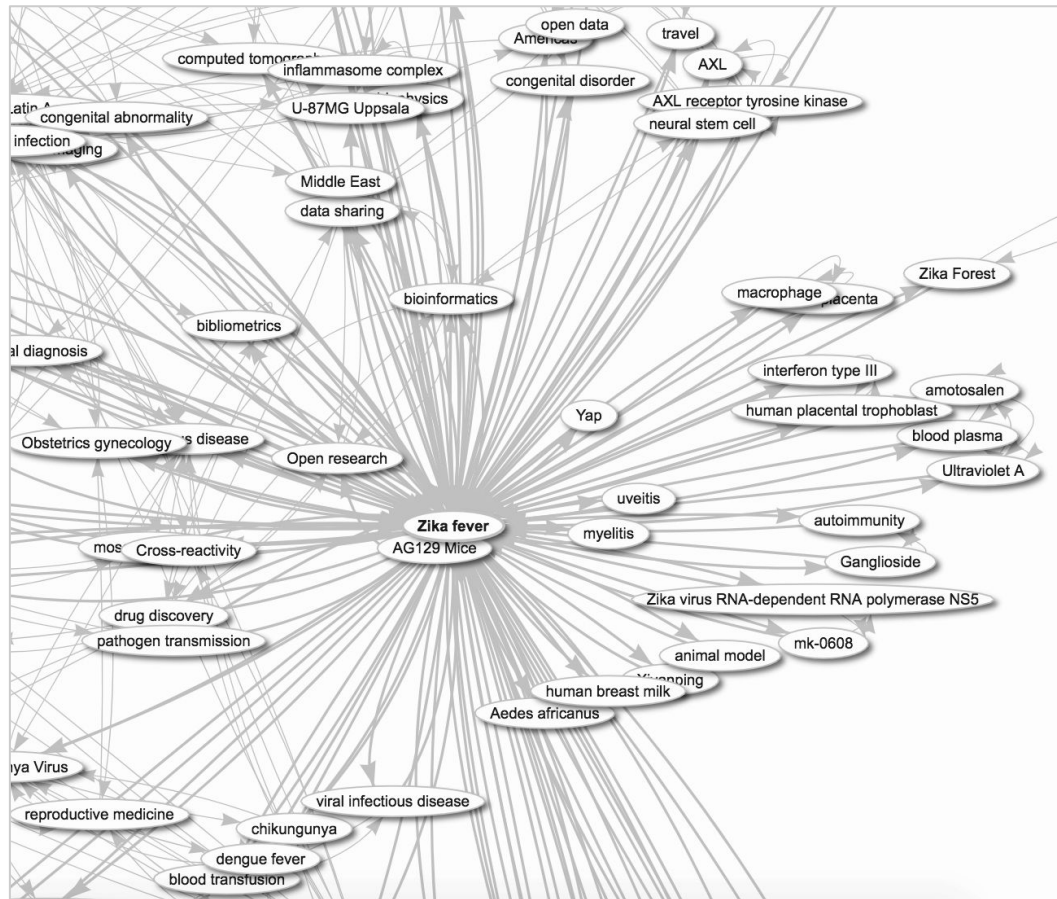
80 million citation links

using the *cites* (P2860)
property



PARTIAL CITATION GRAPH FOR **ULRICH K. LAEMMLI (1970)** • <http://tinyurl.com/y7acpqz4>

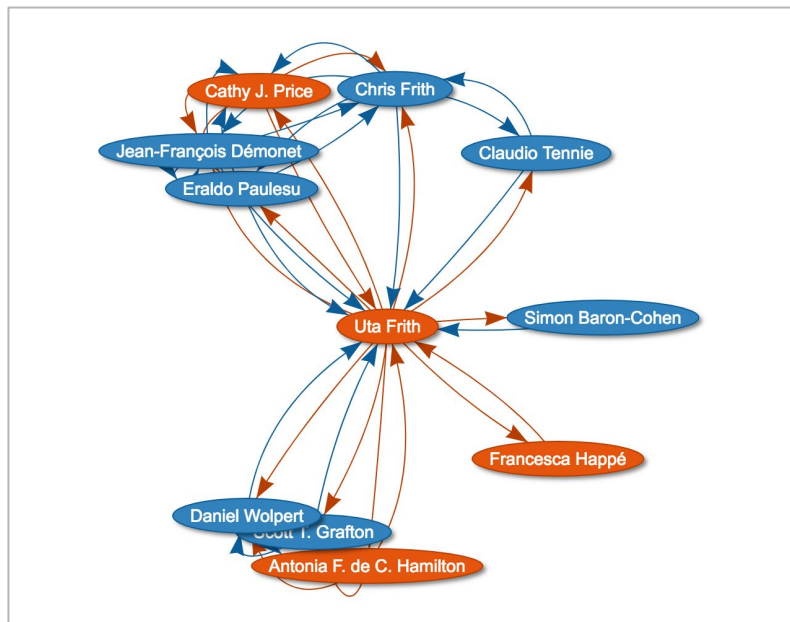
the complete, **annotated**
scholarly publication
corpus on Zika virus
(Q202864)



CO-OCCURRING TOPIC GRAPH FOR **ZIKA VIRUS** • <http://tinyurl.com/l9c9d9m>

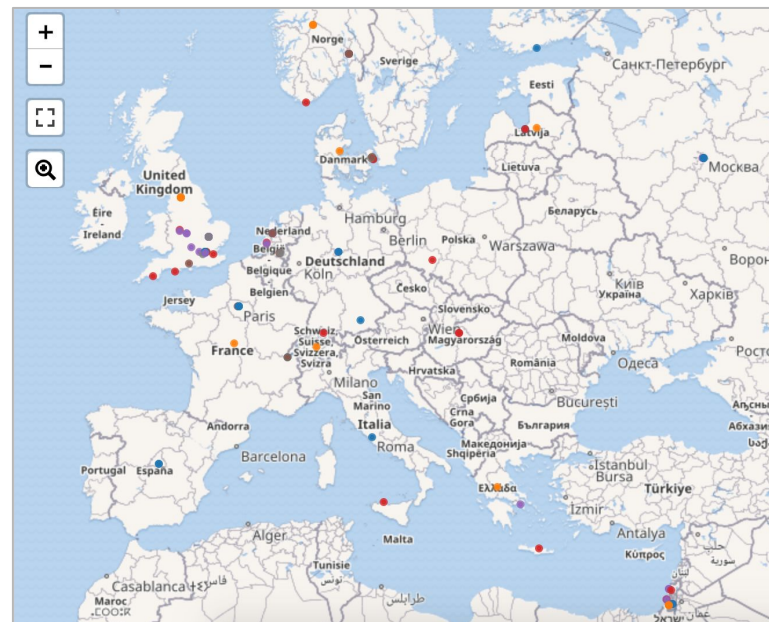
Scholia

an open source, Wikidata-driven **scholarly profile application**



CO-AUTHOR GRAPH FOR **UTA FRITH**

<https://tools.wmflabs.org/scholia/author/Q8219>



LOCATION OF **TURING AWARD** RECIPIENTS

<https://tools.wmflabs.org/scholia/award/Q185667>

New ways to track the impact of a scholarly paper

Supports the following statement(s)

Statements in Wikidata supported by references to this work. Only a maximum of around 2000 statements are shown.

Search:

Item	Property	Value
Cathelicidin antimicrobial peptide	biological process	antimicrobial humoral immune response mediated by antimicrobial peptide
Cathelicidin antimicrobial peptide	biological process	innate immune response
Amyloid beta precursor protein	biological process	antifungal humoral response
Amyloid beta precursor protein	biological process	antibacterial humoral response
Amyloid beta precursor protein	biological process	defense response to Gram-negative bacterium
Amyloid beta precursor protein	biological process	response to yeast
Amyloid beta precursor protein	biological process	defense response to Gram-positive bacterium
Amyloid beta precursor protein	biological process	innate immune response

Example: [Q21090025](#)

Annotations as potential sources for statements

decreased expression in	 schizophrenia ...
determination method	Immunohistochemistry ...
1 reference	
stated in	Reduction in Reelin immunoreactivity in hippocampus of subjects with schizophrenia, bipolar disorder and major depression.
retrieved	24 July 2017
reference URL	https://via.hypothes.is/https://www.ncbi.nlm.nih.gov/pubmed/11126396#annotations:HVXGMnfUEetV2sj-_VpSQ 

Example: [Q13561329](#) (Reelin)

Paper: [Reduction in Reelin immunoreactivity in hippocampus of subjects with schizophrenia, bipolar disorder and major depression](#)

The Initiative for Open Citations

half a billion scholarly citations
from 20+ major publishers are
now available under CC0

STAKEHOLDERS OF THE INITIATIVE FOR OPEN CITATIONS • <http://i4oc.org>



Outreach

15+ talks and keynotes at national and international conferences, including:

ELAG 2016 • Wikimania 2016 • VIVO 2016 • COASP 2016 • NIH Data Science lecture series • Crossref LIVE 2016 • DLF 2016 • OpenCon 2016 • Convegno delle Stelline 2017 • OER 2017 • ElixirCONF 2017 • the 2017 European GLAM-Wiki Coordinators meeting • AAAS 2017 • Wikimania 2017 • FORCE 2017 • WikidataCon 2017 • Crossref LIVE 2017 • SWIB 2017



Technical collaborations



Funding

Seven funders and organizations supporting the initiative



Alfred P. Sloan
FOUNDATION



GORDON AND BETTY
MOORE
FOUNDATION



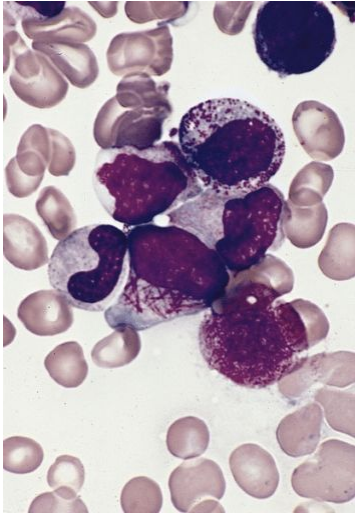
A community



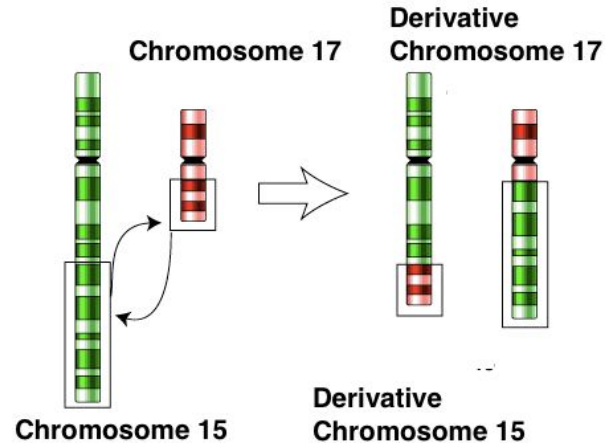
4. WikiCite as evidence: A case study

Acute promyelocytic leukemia

Cancer of the white blood cells



Chromosomal translocation on the RAR α gene



Randomized Phase III Trial of Retinoic Acid and Arsenic Trioxide Versus Retinoic Acid and Chemotherapy in Patients With Acute Promyelocytic Leukemia: Health-Related Quality-of-Life Outcomes

Fabio Efficace, Franco Mandelli, Giuseppe Avvisati, Francesco Cottone, Felicetto Ferrara, Eros Di Bona, Giorgia Specchia, Massimo Breccia, Alessandro Levis, Simona Sica, Olimpia Finizio, Maria Grazia Kropp, Giuseppe Fioritoni, Elisa Cerqui, Marco Vignetti, Sergio Amadori, Richard F. Schlenk, Uwe Platzbecker, and Francesco Lo-Coco

ABSTRACT

Purpose

A randomized clinical trial compared efficacy and toxicity of standard all-*trans*-retinoic acid (ATRA) plus chemotherapy versus ATRA plus arsenic trioxide in patients with newly diagnosed, low- or intermediate-risk acute promyelocytic leukemia (APL). Here, we report health-related quality-of-life (HRQOL) results.

Patients and Methods

HRQOL was a secondary end point of this trial. The European Organisation for Research and Treatment of Cancer Quality of Life Questionnaire–Core 30 was used to assess HRQOL at end of induction and after consolidation therapy. All analyses were based on 156 patients who received at least one dose of treatment, with groups defined according to randomly assigned treatment. Primary analysis was performed, estimating mean HRQOL score over time and differences between treatment arms using a linear mixed model.

Fabio Efficace, Franco Mandelli, Francesco Cottone, and Marco Vignetti, Gruppo Italiano Malattie Ematologiche dell'Adulto; Giuseppe Avvisati, Università Campus BioMedico; Massimo Breccia, Università "La Sapienza"; Simona Sica, Università Cattolica Sacro Cuore; Sergio Amadori and Francesco Lo-Coco, Università Tor Vergata; Francesco Lo-Coco, Fondazione Santa Lucia, Roma; Felicetto Ferrara, Ospedale Cardarelli; Olimpia Finizio, Ospedale Cardarelli, Napoli; Eros Di Bona, Ospedale San Bortolo, Vicenza; Giorgia Specchia, Università di Bari, Bari; Alessandro Levis, Ospedale SS Antonio e Biagio, Alessandria; Maria Grazia Kropp, Azienda Ospedaliera Pugliese Cacicco, Catanzaro; Giuseppe Fioritoni, Ospedale Civile, Pescara; Elisa Cerqui, Ospedale Civile, Brescia, Italy; Richard F. Schlenk, University of Utah, Utah; and Uwe Platzbecker, Universitätsklinikum Carl Gustav Carus, Dresden, Germany.

Published online ahead of print at

Findings support the use of retinoic acid plus arsenic trioxide as preferred first-line treatment

Effects of arsenic trioxide known for decades in China

Original papers were published in the Chinese language and in journals that are obscure even to most Chinese readers

SCIENCE CHINA
Life Sciences

• REVIEW •

June 2013 Vol.56 No.6: 495–502
doi: 10.1007/s11427-013-4487-z

A drug from poison: how the therapeutic effect of arsenic trioxide on acute promyelocytic leukemia was discovered

RAO Yi^{1*}, LI RunHong² & ZHANG DaQing²

¹Peking-Tsinghua Center for Life Sciences at Peking University School of Life Sciences, Beijing 100871, China;

²Peking University Health Sciences Center, Beijing 100871, China

Received March 27, 2013; accepted April 5, 2013; published online May 3, 2013

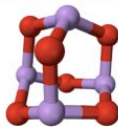
s://zh.wiki

Infobo

4. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. 32. 33. 34. 35. 36. 37. 38. 39. 40. 41. 42. 43. 44. 45. 46. 47. 48. 49. 50. 51. 52. 53. 54. 55. 56. 57. 58. 59. 60. 61. 62. 63. 64. 65. 66. 67. 68. 69. 70. 71. 72. 73. 74. 75. 76. 77. 78. 79. 80. 81. 82. 83. 84. 85. 86. 87. 88. 89. 90. 91. 92. 93. 94. 95. 96. 97. 98. 99. 100. 101. 102. 103. 104. 105. 106. 107. 108. 109. 110. 111. 112. 113. 114. 115. 116. 117. 118. 119. 120. 121. 122. 123. 124. 125. 126. 127. 128. 129. 130. 131. 132. 133. 134. 135. 136. 137. 138. 139. 140. 141. 142. 143. 144. 145. 146. 147. 148. 149. 150. 151. 152. 153. 154. 155. 156. 157. 158. 159. 160. 161. 162. 163. 164. 165. 166. 167. 168. 169. 170. 171. 172. 173. 174. 175. 176. 177. 178. 179. 180. 181. 182. 183. 184. 185. 186. 187. 188. 189. 190. 191. 192. 193. 194. 195. 196. 197. 198. 199. 200. 201. 202. 203. 204. 205. 206. 207. 208. 209. 210. 211. 212. 213. 214. 215. 216. 217. 218. 219. 220. 221. 222. 223. 224. 225. 226. 227. 228. 229. 230. 231. 232. 233. 234. 235. 236. 237. 238. 239. 240. 241. 242. 243. 244. 245. 246. 247. 248. 249. 250. 251. 252. 253. 254. 255. 256. 257. 258. 259. 260. 261. 262. 263. 264. 265. 266. 267. 268. 269. 270. 271. 272. 273. 274. 275. 276. 277. 278. 279. 280. 281. 282. 283. 284. 285. 286. 287. 288. 289. 290. 291. 292. 293. 294. 295. 296. 297. 298. 299. 300. 301. 302. 303. 304. 305. 306. 307. 308. 309. 310. 311. 312. 313. 314. 315. 316. 317. 318. 319. 320. 321. 322. 323. 324. 325. 326. 327. 328. 329. 330. 331. 332. 333. 334. 335. 336. 337. 338. 339. 340. 341. 342. 343. 344. 345. 346. 347. 348. 349. 350. 351. 352. 353. 354. 355. 356. 357. 358. 359. 360. 361. 362. 363. 364. 365. 366. 367. 368. 369. 370. 371. 372. 373. 374. 375. 376. 377. 378. 379. 380. 381. 382. 383. 384. 385. 386. 387. 388. 389. 390. 391. 392. 393. 394. 395. 396. 397. 398. 399. 400. 401. 402. 403. 404. 405. 406. 407. 408. 409. 410. 411. 412. 413. 414. 415. 416. 417. 418. 419. 420. 421. 422. 423. 424. 425. 426. 427. 428. 429. 430. 431. 432. 433. 434. 435. 436. 437. 438. 439. 440. 441. 442. 443. 444. 445. 446. 447. 448. 449. 450. 451. 452. 453. 454. 455. 456. 457. 458. 459. 460. 461. 462. 463. 464. 465. 466. 467. 468. 469. 470. 471. 472. 473. 474. 475. 476. 477. 478. 479. 480. 481. 482. 483. 484. 485. 486. 487. 488. 489. 490. 491. 492. 493. 494. 495. 496. 497. 498. 499. 500. 501. 502. 503. 504. 505. 506. 507. 508. 509. 510. 511. 512. 513. 514. 515. 516. 517. 518. 519. 520. 521. 522. 523. 524. 525. 526. 527. 528. 529. 530. 531. 532. 533. 534. 535. 536. 537. 538. 539. 540. 541. 542. 543. 544. 545. 546. 547. 548. 549. 550. 551. 552. 553. 554. 555. 556. 557. 558. 559. 560. 561. 562. 563. 564. 565. 566. 567. 568. 569. 570. 571. 572. 573. 574. 575. 576. 577. 578. 579. 580. 581. 582. 583. 584. 585. 586. 587. 588. 589. 590. 591. 592. 593. 594. 595. 596. 597. 598. 599. 600. 601. 602. 603. 604. 605. 606. 607. 608. 609. 610. 611. 612. 613. 614. 615. 616. 617. 618. 619. 620. 621. 622. 623. 624. 625. 626. 627. 628. 629. 630. 631. 632. 633. 634. 635. 636. 637. 638. 639. 640. 641. 642. 643. 644. 645. 646. 647. 648. 649. 650. 651. 652. 653. 654. 655. 656. 657. 658. 659. 660. 661. 662. 663. 664. 665. 666. 667. 668. 669. 670. 671. 672. 673. 674. 675. 676. 677. 678. 679. 680. 681. 682. 683. 684. 685. 686. 687. 688. 689. 690. 691. 692. 693. 694. 695. 696. 697. 698. 699. 700. 701. 702. 703. 704. 705. 706. 707. 708. 709. 710. 711. 712. 713. 714. 715. 716. 717. 718. 719. 720. 721. 722. 723. 724. 725. 726. 727. 728. 729. 730. 731. 732. 733. 734. 735. 736. 737. 738. 739. 740. 741. 742. 743. 744. 745. 746. 747. 748. 749. 750. 751. 752. 753. 754. 755. 756. 757. 758. 759. 760. 761. 762. 763. 764. 765. 766. 767. 768. 769. 770. 771. 772. 773. 774. 775. 776. 777. 778. 779. 780. 781. 782. 783. 784. 785. 786. 787. 788. 789. 790. 791. 792. 793. 794. 795. 796. 797. 798. 799. 800. 801. 802. 803. 804. 805. 806. 807. 808. 809. 810. 811. 812. 813. 814. 815. 816. 817. 818. 819. 820. 821. 822. 823. 824. 825. 826. 827. 828. 829. 830. 831. 832. 833. 834. 835. 836. 837. 838. 839. 840. 841. 842. 843.

pedia: 首页

三氧化二砷



Arsenic trioxide

Arsenic trioxide

亞砷酸酐：氯化砷(Ⅲ)：砒霜：鶴頂紅

识别

Visit the main page

0 1 1 0 0 0

https://en.wikipedia.org/wiki/Main_Page

Sea

Search

Infobo

Arsenic trioxide

From Wikipedia, the free encyclopedia

Arsenic trioxide is an **inorganic compound** with the **formula** As_2O_3 . This commercially important **oxide of arsenic** is the main precursor to other arsenic compounds, including **organoarsenic compounds**. Approximately 50,000 **tonnes** are produced annually.^[4] Many applications are controversial given the high toxicity of arsenic compounds.

Contents [\[hide\]](#)

- 1 Production and occurrence
- 2 Properties and reactions
- 3 Structure
- 4 Uses
- 5 Medical applications
- 6 Toxicology
- 7 Environmental problems
- 8 References
- 9 External links

Production and occurrence [\[edit\]](#)

Arsenic trioxide can be generated via routine processing of arsenic compounds including the oxidation (combustion) of arsenic and arsenic-containing minerals in air. Illustrative

X
Arsenic trioxide



As³⁺ O²⁻

Names

Systematic IUPAC name

Diarsenic trioxide

Other names

Arsenic(III) oxide,

The Gene Wiki project, circa 2008

Summarized
knowledge via
crowdsourcing

IL2-inducible T-cell kinase

Function

This gene encodes an intracellular tyrosine kinase expressed in T-cells. The protein is thought to play a role in T-cell proliferation and differentiation.^{[2][3]}

Structure

This protein contains the following domains, which are often found in intracellular kinases:^[4]

- N-terminus – PH (pleckstrin homology domain)
- BTK – Bruton's tyrosine kinase Cys-rich motif
- SH3 – (Src homology 3)
- SH2 – (Src homology 2)
- C-terminus – tyrosine kinase, catalytic domain

Interactions

ITK (gene) has been shown to interact with FYN,^{[5][6]} Wiskott-Aldrich syndrome protein,^{[7][8]} KHDRBS1,^{[8][9][10]} PLCG1,^{[10][11]} Lymphocyte cytosolic protein 2,^{[11][12]} Linker of activated T cells,^{[12][13]} Karyophem alpha 2,^[14] Grb2^{[5][9]} and Peptidyl/prolyl isomerase A.^[15]

References

- ¹ Gibson S, Leung B, Squire JA, Hill M, Arima N, Goss P, Hogg D, Mills GB (September 1993). "Identification, cloning, and characterization of a novel human T-cell-specific tyrosine kinase located at the hematopoietin complex on chromosome 5q". *Blood* **82** (5): 1561–72. PMID 8354205.
- ² Koscak Y, Felices M, Berg LJ (October 2006). "Itk and Th2 responses: action but no reaction". *Trends Immunol.* **27** (10): 453–60. doi:10.1016/j.it.2006.08.008. PMID 16931156.
- ³ "Entrez Gene: ITK (IL2-inducible T-cell kinase)".
- ⁴ Hawkins J, Marcy A (July 2001). "Characterization of Itk tyrosine kinase: contribution of noncatalytic domains to enzymatic activity". *Protein Expr. Purif.* **22** (2): 211–9. doi:10.1006/prep.2001.1447. PMID 11437596.
- ⁵ ⁶ ⁷ ⁸ ⁹ ¹⁰ ¹¹ ¹² ¹³ ¹⁴ ¹⁵ ¹⁶ ¹⁷ ¹⁸ ¹⁹ ²⁰ ²¹ ²² ²³ ²⁴ ²⁵ ²⁶ ²⁷ ²⁸ ²⁹ ³⁰ ³¹ ³² ³³ ³⁴ ³⁵ ³⁶ ³⁷ ³⁸ ³⁹ ⁴⁰ ⁴¹ ⁴² ⁴³ ⁴⁴ ⁴⁵ ⁴⁶ ⁴⁷ ⁴⁸ ⁴⁹ ⁵⁰ ⁵¹ ⁵² ⁵³ ⁵⁴ ⁵⁵ ⁵⁶ ⁵⁷ ⁵⁸ ⁵⁹ ⁶⁰ ⁶¹ ⁶² ⁶³ ⁶⁴ ⁶⁵ ⁶⁶ ⁶⁷ ⁶⁸ ⁶⁹ ⁷⁰ ⁷¹ ⁷² ⁷³ ⁷⁴ ⁷⁵ ⁷⁶ ⁷⁷ ⁷⁸ ⁷⁹ ⁸⁰ ⁸¹ ⁸² ⁸³ ⁸⁴ ⁸⁵ ⁸⁶ ⁸⁷ ⁸⁸ ⁸⁹ ⁹⁰ ⁹¹ ⁹² ⁹³ ⁹⁴ ⁹⁵ ⁹⁶ ⁹⁷ ⁹⁸ ⁹⁹ ¹⁰⁰ ¹⁰¹ ¹⁰² ¹⁰³ ¹⁰⁴ ¹⁰⁵ ¹⁰⁶ ¹⁰⁷ ¹⁰⁸ ¹⁰⁹ ¹¹⁰ ¹¹¹ ¹¹² ¹¹³ ¹¹⁴ ¹¹⁵ ¹¹⁶ ¹¹⁷ ¹¹⁸ ¹¹⁹ ¹²⁰ ¹²¹ ¹²² ¹²³ ¹²⁴ ¹²⁵ ¹²⁶ ¹²⁷ ¹²⁸ ¹²⁹ ¹³⁰ ¹³¹ ¹³² ¹³³ ¹³⁴ ¹³⁵ ¹³⁶ ¹³⁷ ¹³⁸ ¹³⁹ ¹⁴⁰ ¹⁴¹ ¹⁴² ¹⁴³ ¹⁴⁴ ¹⁴⁵ ¹⁴⁶ ¹⁴⁷ ¹⁴⁸ ¹⁴⁹ ¹⁵⁰ ¹⁵¹ ¹⁵² ¹⁵³ ¹⁵⁴ ¹⁵⁵ ¹⁵⁶ ¹⁵⁷ ¹⁵⁸ ¹⁵⁹ ¹⁶⁰ ¹⁶¹ ¹⁶² ¹⁶³ ¹⁶⁴ ¹⁶⁵ ¹⁶⁶ ¹⁶⁷ ¹⁶⁸ ¹⁶⁹ ¹⁷⁰ ¹⁷¹ ¹⁷² ¹⁷³ ¹⁷⁴ ¹⁷⁵ ¹⁷⁶ ¹⁷⁷ ¹⁷⁸ ¹⁷⁹ ¹⁸⁰ ¹⁸¹ ¹⁸² ¹⁸³ ¹⁸⁴ ¹⁸⁵ ¹⁸⁶ ¹⁸⁷ ¹⁸⁸ ¹⁸⁹ ¹⁹⁰ ¹⁹¹ ¹⁹² ¹⁹³ ¹⁹⁴ ¹⁹⁵ ¹⁹⁶ ¹⁹⁷ ¹⁹⁸ ¹⁹⁹ ²⁰⁰ ²⁰¹ ²⁰² ²⁰³ ²⁰⁴ ²⁰⁵ ²⁰⁶ ²⁰⁷ ²⁰⁸ ²⁰⁹ ²¹⁰ ²¹¹ ²¹² ²¹³ ²¹⁴ ²¹⁵ ²¹⁶ ²¹⁷ ²¹⁸ ²¹⁹ ²²⁰ ²²¹ ²²² ²²³ ²²⁴ ²²⁵ ²²⁶ ²²⁷ ²²⁸ ²²⁹ ²³⁰ ²³¹ ²³² ²³³ ²³⁴ ²³⁵ ²³⁶ ²³⁷ ²³⁸ ²³⁹ ²⁴⁰ ²⁴¹ ²⁴² ²⁴³ ²⁴⁴ ²⁴⁵ ²⁴⁶ ²⁴⁷ ²⁴⁸ ²⁴⁹ ²⁵⁰ ²⁵¹ ²⁵² ²⁵³ ²⁵⁴ ²⁵⁵ ²⁵⁶ ²⁵⁷ ²⁵⁸ ²⁵⁹ ²⁶⁰ ²⁶¹ ²⁶² ²⁶³ ²⁶⁴ ²⁶⁵ ²⁶⁶ ²⁶⁷ ²⁶⁸ ²⁶⁹ ²⁷⁰ ²⁷¹ ²⁷² ²⁷³ ²⁷⁴ ²⁷⁵ ²⁷⁶ ²⁷⁷ ²⁷⁸ ²⁷⁹ ²⁸⁰ ²⁸¹ ²⁸² ²⁸³ ²⁸⁴ ²⁸⁵ ²⁸⁶ ²⁸⁷ ²⁸⁸ ²⁸⁹ ²⁹⁰ ²⁹¹ ²⁹² ²⁹³ ²⁹⁴ ²⁹⁵ ²⁹⁶ ²⁹⁷ ²⁹⁸ ²⁹⁹ ³⁰⁰ ³⁰¹ ³⁰² ³⁰³ ³⁰⁴ ³⁰⁵ ³⁰⁶ ³⁰⁷ ³⁰⁸ ³⁰⁹ ³¹⁰ ³¹¹ ³¹² ³¹³ ³¹⁴ ³¹⁵ ³¹⁶ ³¹⁷ ³¹⁸ ³¹⁹ ³²⁰ ³²¹ ³²² ³²³ ³²⁴ ³²⁵ ³²⁶ ³²⁷ ³²⁸ ³²⁹ ³³⁰ ³³¹ ³³² ³³³ ³³⁴ ³³⁵ ³³⁶ ³³⁷ ³³⁸ ³³⁹ ³⁴⁰ ³⁴¹ ³⁴² ³⁴³ ³⁴⁴ ³⁴⁵ ³⁴⁶ ³⁴⁷ ³⁴⁸ ³⁴⁹ ³⁵⁰ ³⁵¹ ³⁵² ³⁵³ ³⁵⁴ ³⁵⁵ ³⁵⁶ ³⁵⁷ ³⁵⁸ ³⁵⁹ ³⁶⁰ ³⁶¹ ³⁶² ³⁶³ ³⁶⁴ ³⁶⁵ ³⁶⁶ ³⁶⁷ ³⁶⁸ ³⁶⁹ ³⁷⁰ ³⁷¹ ³⁷² ³⁷³ ³⁷⁴ ³⁷⁵ ³⁷⁶ ³⁷⁷ ³⁷⁸ ³⁷⁹ ³⁸⁰ ³⁸¹ ³⁸² ³⁸³ ³⁸⁴ ³⁸⁵ ³⁸⁶ ³⁸⁷ ³⁸⁸ ³⁸⁹ ³⁹⁰ ³⁹¹ ³⁹² ³⁹³ ³⁹⁴ ³⁹⁵ ³⁹⁶ ³⁹⁷ ³⁹⁸ ³⁹⁹ ⁴⁰⁰ ⁴⁰¹ ⁴⁰² ⁴⁰³ ⁴⁰⁴ ⁴⁰⁵ ⁴⁰⁶ ⁴⁰⁷ ⁴⁰⁸ ⁴⁰⁹ ⁴¹⁰ ⁴¹¹ ⁴¹² ⁴¹³ ⁴¹⁴ ⁴¹⁵ ⁴¹⁶ ⁴¹⁷ ⁴¹⁸ ⁴¹⁹ ⁴²⁰ ⁴²¹ ⁴²² ⁴²³ ⁴²⁴ ⁴²⁵ ⁴²⁶ ⁴²⁷ ⁴²⁸ ⁴²⁹ ⁴³⁰ ⁴³¹ ⁴³² ⁴³³ ⁴³⁴ ⁴³⁵ ⁴³⁶ ⁴³⁷ ⁴³⁸ ⁴³⁹ ⁴⁴⁰ ⁴⁴¹ ⁴⁴² ⁴⁴³ ⁴⁴⁴ ⁴⁴⁵ ⁴⁴⁶ ⁴⁴⁷ ⁴⁴⁸ ⁴⁴⁹ ⁴⁵⁰ ⁴⁵¹ ⁴⁵² ⁴⁵³ ⁴⁵⁴ ⁴⁵⁵ ⁴⁵⁶ ⁴⁵⁷ ⁴⁵⁸ ⁴⁵⁹ ⁴⁶⁰ ⁴⁶¹ ⁴⁶² ⁴⁶³ ⁴⁶⁴ ⁴⁶⁵ ⁴⁶⁶ ⁴⁶⁷ ⁴⁶⁸ ⁴⁶⁹ ⁴⁷⁰ ⁴⁷¹ ⁴⁷² ⁴⁷³ ⁴⁷⁴ ⁴⁷⁵ ⁴⁷⁶ ⁴⁷⁷ ⁴⁷⁸ ⁴⁷⁹ ⁴⁸⁰ ⁴⁸¹ ⁴⁸² ⁴⁸³ ⁴⁸⁴ ⁴⁸⁵ ⁴⁸⁶ ⁴⁸⁷ ⁴⁸⁸ ⁴⁸⁹ ⁴⁹⁰ ⁴⁹¹ ⁴⁹² ⁴⁹³ ⁴⁹⁴ ⁴⁹⁵ ⁴⁹⁶ ⁴⁹⁷ ⁴⁹⁸ ⁴⁹⁹ ⁵⁰⁰ ⁵⁰¹ ⁵⁰² ⁵⁰³ ⁵⁰⁴ ⁵⁰⁵ ⁵⁰⁶ ⁵⁰⁷ ⁵⁰⁸ ⁵⁰⁹ ⁵¹⁰ ⁵¹¹ ⁵¹² ⁵¹³ ⁵¹⁴ ⁵¹⁵ ⁵¹⁶ ⁵¹⁷ ⁵¹⁸ ⁵¹⁹ ⁵²⁰ ⁵²¹ ⁵²² ⁵²³ ⁵²⁴ ⁵²⁵ ⁵²⁶ ⁵²⁷ ⁵²⁸ ⁵²⁹ ⁵³⁰ ⁵³¹ ⁵³² ⁵³³ ⁵³⁴ ⁵³⁵ ⁵³⁶ ⁵³⁷ ⁵³⁸ ⁵³⁹ ⁵⁴⁰ ⁵⁴¹ ⁵⁴² ⁵⁴³ ⁵⁴⁴ ⁵⁴⁵ ⁵⁴⁶ ⁵⁴⁷ ⁵⁴⁸ ⁵⁴⁹ ⁵⁵⁰ ⁵⁵¹ ⁵⁵² ⁵⁵³ ⁵⁵⁴ ⁵⁵⁵ ⁵⁵⁶ ⁵⁵⁷ ⁵⁵⁸ ⁵⁵⁹ ⁵⁶⁰ ⁵⁶¹ ⁵⁶² ⁵⁶³ ⁵⁶⁴ ⁵⁶⁵ ⁵⁶⁶ ⁵⁶⁷ ⁵⁶⁸ ⁵⁶⁹ ⁵⁷⁰ ⁵⁷¹ ⁵⁷² ⁵⁷³ ⁵⁷⁴ ⁵⁷⁵ ⁵⁷⁶ ⁵⁷⁷ ⁵⁷⁸ ⁵⁷⁹ ⁵⁸⁰ ⁵⁸¹ ⁵⁸² ⁵⁸³ ⁵⁸⁴ ⁵⁸⁵ ⁵⁸⁶ ⁵⁸⁷ ⁵⁸⁸ ⁵⁸⁹ ⁵⁹⁰ ⁵⁹¹ ⁵⁹² ⁵⁹³ ⁵⁹⁴ ⁵⁹⁵ ⁵⁹⁶ ⁵⁹⁷ ⁵⁹⁸ ⁵⁹⁹ ⁶⁰⁰ ⁶⁰¹ ⁶⁰² ⁶⁰³ ⁶⁰⁴ ⁶⁰⁵ ⁶⁰⁶ ⁶⁰⁷ ⁶⁰⁸ ⁶⁰⁹ ⁶¹⁰ ⁶¹¹ ⁶¹² ⁶¹³ ⁶¹⁴ ⁶¹⁵ ⁶¹⁶ ⁶¹⁷ ⁶¹⁸ ⁶¹⁹ ⁶²⁰ ⁶²¹ ⁶²² ⁶²³ ⁶²⁴ ⁶²⁵ ⁶²⁶ ⁶²⁷ ⁶²⁸ ⁶²⁹ ⁶³⁰ ⁶³¹ ⁶³² ⁶³³ ⁶³⁴ ⁶³⁵ ⁶³⁶ ⁶³⁷ ⁶³⁸ ⁶³⁹ ⁶⁴⁰ ⁶⁴¹ ⁶⁴² ⁶⁴³ ⁶⁴⁴ ⁶⁴⁵ ⁶⁴⁶ ⁶⁴⁷ ⁶⁴⁸ ⁶⁴⁹ ⁶⁵⁰ ⁶⁵¹ ⁶⁵² ⁶⁵³ ⁶⁵⁴ ⁶⁵⁵ ⁶⁵⁶ ⁶⁵⁷ ⁶⁵⁸ ⁶⁵⁹ ⁶⁶⁰ ⁶⁶¹ ⁶⁶² ⁶⁶³ ⁶⁶⁴ ⁶⁶⁵ ⁶⁶⁶ ⁶⁶⁷ ⁶⁶⁸ ⁶⁶⁹ ⁶⁷⁰ ⁶⁷¹ ⁶⁷² ⁶⁷³ ⁶⁷⁴ ⁶⁷⁵ ⁶⁷⁶ ⁶⁷⁷ ⁶⁷⁸ ⁶⁷⁹ ⁶⁸⁰ ⁶⁸¹ ⁶⁸² ⁶⁸³ ⁶⁸⁴ ⁶⁸⁵ ⁶⁸⁶ ⁶⁸⁷ ⁶⁸⁸ ⁶⁸⁹ ⁶⁹⁰ ⁶⁹¹ ⁶⁹² ⁶⁹³ ⁶⁹⁴ ⁶⁹⁵ ⁶⁹⁶ ⁶⁹⁷ ⁶⁹⁸ ⁶⁹⁹ ⁷⁰⁰ ⁷⁰¹ ⁷⁰² ⁷⁰³ ⁷⁰⁴ ⁷⁰⁵ ⁷⁰⁶ ⁷⁰⁷ ⁷⁰⁸ ⁷⁰⁹ ⁷¹⁰ ⁷¹¹ ⁷¹² ⁷¹³ ⁷¹⁴ ⁷¹⁵ ⁷¹⁶ ⁷¹⁷ ⁷¹⁸ ⁷¹⁹ ⁷²⁰ ⁷²¹ ⁷²² ⁷²³ ⁷²⁴ ⁷²⁵ ⁷²⁶ ⁷²⁷ ⁷²⁸ ⁷²⁹ ⁷³⁰ ⁷³¹ ⁷³² ⁷³³ ⁷³⁴ ⁷³⁵ ⁷³⁶ ⁷³⁷ ⁷³⁸ ⁷³⁹ ⁷⁴⁰ ⁷⁴¹ ⁷⁴² ⁷⁴³ ⁷⁴⁴ ⁷⁴⁵ ⁷⁴⁶ ⁷⁴⁷ ⁷⁴⁸ ⁷⁴⁹ ⁷⁵⁰ ⁷⁵¹ ⁷⁵² ⁷⁵³ ⁷⁵⁴ ⁷⁵⁵ ⁷⁵⁶ ⁷⁵⁷ ⁷⁵⁸ ⁷⁵⁹ ⁷⁶⁰ ⁷⁶¹ ⁷⁶² ⁷⁶³ ⁷⁶⁴ ⁷⁶⁵ ⁷⁶⁶ ⁷⁶⁷ ⁷⁶⁸ ⁷⁶⁹ ⁷⁷⁰ ⁷⁷¹ ⁷⁷² ⁷⁷³ ⁷⁷⁴ ⁷⁷⁵ ⁷⁷⁶ ⁷⁷⁷ ⁷⁷⁸ ⁷⁷⁹ ⁷⁸⁰ ⁷⁸¹ ⁷⁸² ⁷⁸³ ⁷⁸⁴ ⁷⁸⁵ ⁷⁸⁶ ⁷⁸⁷ ⁷⁸⁸ ⁷⁸⁹ ⁷⁹⁰ ⁷⁹¹ ⁷⁹² ⁷⁹³ ⁷⁹⁴ ⁷⁹⁵ ⁷⁹⁶ ⁷⁹⁷ ⁷⁹⁸ ⁷⁹⁹ ⁸⁰⁰ ⁸⁰¹ ⁸⁰² ⁸⁰³ ⁸⁰⁴ ⁸⁰⁵ ⁸⁰⁶ ⁸⁰⁷ ⁸⁰⁸ ⁸⁰⁹ ⁸¹⁰ ⁸¹¹ ⁸¹² ⁸¹³ ⁸¹⁴ ⁸¹⁵ ⁸¹⁶ ⁸¹⁷ ⁸¹⁸ ⁸¹⁹ ⁸²⁰ ⁸²¹ ⁸²² ⁸²³ ⁸²⁴ ⁸²⁵ ⁸²⁶ ⁸²⁷ ⁸²⁸ ⁸²⁹ ⁸³⁰ ⁸³¹ ⁸³² ⁸³³ ⁸³⁴ ⁸³⁵ ⁸³⁶ ⁸³⁷ ⁸³⁸ ⁸³⁹ ⁸⁴⁰ ⁸⁴¹ ⁸⁴² ⁸⁴³ ⁸⁴⁴ ⁸⁴⁵ ⁸⁴⁶ ⁸⁴⁷ ⁸⁴⁸ ⁸⁴⁹ ⁸⁵⁰ ⁸⁵¹ ⁸⁵² ⁸⁵³ ⁸⁵⁴ ⁸⁵⁵ ⁸⁵⁶ ⁸⁵⁷ ⁸⁵⁸ ⁸⁵⁹ ⁸⁶⁰ ⁸⁶¹ ⁸⁶² ⁸⁶³ ⁸⁶⁴ ⁸⁶⁵ ⁸⁶⁶ ⁸⁶⁷ ⁸⁶⁸ ⁸⁶⁹ ⁸⁷⁰ ⁸⁷¹ ⁸⁷² ⁸⁷³ ⁸⁷⁴ ⁸⁷⁵ ⁸⁷⁶ ⁸⁷⁷ ⁸⁷⁸ ⁸⁷⁹ ⁸⁸⁰ ⁸⁸¹ ⁸⁸² ⁸⁸³ ⁸⁸⁴ ⁸⁸⁵ ⁸⁸⁶ ⁸⁸⁷ ⁸⁸⁸ ⁸⁸⁹ ⁸⁹⁰ ⁸⁹¹ ⁸⁹² ⁸⁹³ ⁸⁹⁴ ⁸⁹⁵ ⁸⁹⁶ ⁸⁹⁷ ⁸⁹⁸ ⁸⁹⁹ ⁹⁰⁰ ⁹⁰¹ ⁹⁰² ⁹⁰³ ⁹⁰⁴ ⁹⁰⁵ ⁹⁰⁶ ⁹⁰⁷ ⁹⁰⁸ ⁹⁰⁹ ⁹¹⁰ ⁹¹¹ ⁹¹² ⁹¹³ ⁹¹⁴ ⁹¹⁵ ⁹¹⁶ ⁹¹⁷ ⁹¹⁸ ⁹¹⁹ ⁹²⁰ ⁹²¹ ⁹²² ⁹²³ ⁹²⁴ ⁹²⁵ ⁹²⁶ ⁹²⁷ ⁹²⁸ ⁹²⁹ ⁹³⁰ ⁹³¹ ⁹³² ⁹³³ ⁹³⁴ ⁹³⁵ ⁹³⁶ ⁹³⁷ ⁹³⁸ ⁹³⁹ ⁹⁴⁰ ⁹⁴¹ ⁹⁴² ⁹⁴³ ⁹⁴⁴ ⁹⁴⁵ ⁹⁴⁶ ⁹⁴⁷ ⁹⁴⁸ ⁹⁴⁹ ⁹⁵⁰ ⁹⁵¹ ⁹⁵² ⁹⁵³ ⁹⁵⁴ ⁹⁵⁵ ⁹⁵⁶ ⁹⁵⁷ ⁹⁵⁸ ⁹⁵⁹ ⁹⁶⁰ ⁹⁶¹ ⁹⁶² ⁹⁶³ ⁹⁶⁴ ⁹⁶⁵ ⁹⁶⁶ ⁹⁶⁷ ⁹⁶⁸ ⁹⁶⁹ ⁹⁷⁰ ⁹⁷¹ ⁹⁷² ⁹⁷³ ⁹⁷⁴ ⁹⁷⁵ ⁹⁷⁶ ⁹⁷⁷ ⁹⁷⁸ ⁹⁷⁹ ⁹⁸⁰ ⁹⁸¹ ⁹⁸² ⁹⁸³ ⁹⁸⁴ ⁹⁸⁵ ⁹⁸⁶ ⁹⁸⁷ ⁹⁸⁸ ⁹⁸⁹ ⁹⁹⁰ ⁹⁹¹ ⁹⁹² ⁹⁹³ ⁹⁹⁴ ⁹⁹⁵ ⁹⁹⁶ ⁹⁹⁷ ⁹⁹⁸ ⁹⁹⁹ ¹⁰⁰⁰

Data imported
from structured
databases

Reelin

From Wikipedia, the free encyclopedia

Reelin is a large secreted [extracellular matrix glycoprotein](#) that helps regulate processes of [neuronal migration](#) and positioning in the developing brain by controlling [cell–cell interactions](#).

Besides this important role in early [development](#), reelin continues to work in the adult brain. It

modulates [synaptic plasticity](#) by

[2][3] It also stimulates dendrite[4]

migration of [neuroblasts](#) generat

[zones](#). It is found not only in the

tissues.

Reelin has been suggested to be

expression of the protein has be

[bipolar disorder](#), but the cause of this observation remains uncertain as studies show that

[psychotropic medication itself affects reelin expression](#). Moreover, epigenetic hypotheses aimed at

explaining the changed levels of reelin expression^[6] are controversial.^{[7][8]} Total lack of reelin

causes a form of [lissencephaly](#). Reelin may also play a role in [Alzheimer's disease](#), [temporal lobe](#)

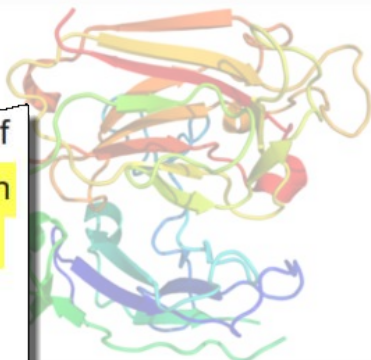
[epilepsy](#) and [autism](#).

Reelin's name comes from the abnormal reeling [gait](#) of *reeler* mice,^[9] which were later found to

have a deficiency of this brain [protein](#) and were [homozygous](#) for mutation of the RELN gene. The

Reelin has been suggested to be implicated in pathogenesis of several brain diseases. The expression of the protein has been found to be significantly lower in schizophrenia and psychotic bipolar disorder, but the cause of this observation remains uncertain as studies show that psychotropic medication itself

Reelin



3D ribbon structure of the third reelin repeat domain.^[1]

Available structures

PDB Ortholog search: [PDBe](#) [RCSB](#)

List of PDB id codes [\[show\]](#)

Identifiers

Symbols [RELN](#) ; [LIS2](#); [PRO1598](#); [RL](#)

External [OMIM: 600514](#) [MGI: 103022](#)

Wikidata is to data as Wikipedia is to text

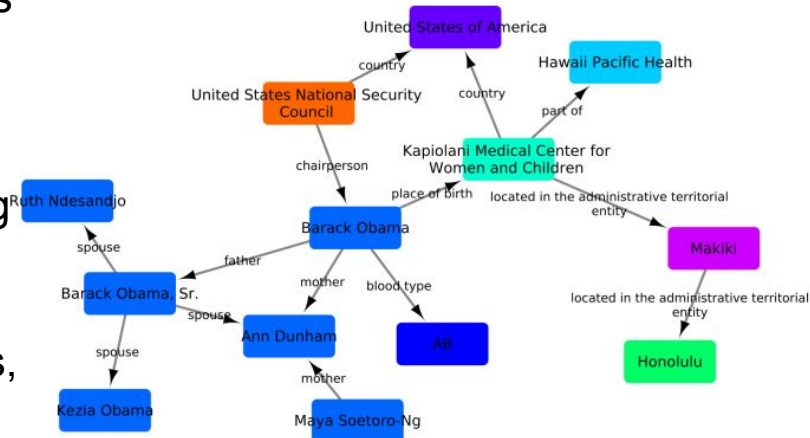
Wikidata is a collaboratively edited knowledge base operated by the Wikimedia Foundation



- Completely free, even for commercial usage (CC0)
- Anybody can contribute
- Covers all domains of knowledge
- Extensive item history, talk pages, projects, users
- Integration with the semantic web
- High performance query engine (SPARQL)

- Stable! Long term support not dictated by funding cycles
- Actively developed
- Already has large number of active users, editors, contributors!

A giant graph of knowledge!



A Wikidata Python module integrating the MediaWiki API and the Wikidata SPARQL endpoint

397 commits

2 branches

1 release

7 contributors

MIT

Branch: master

New pull request

Find file

Clone or download

 sebotic fixed an omission where new items don't get created when domain not s... Latest commit 2f5d2fd 22 hours ago

 doc

Wikidata to Wikipedia mapping prototype for diseases added. 2 years ago

 wikidataintegrator

fixed an omission where new items don't get created when domain not s... 22 hours ago

New Item

People

Build History

Edit View

Delete View

Manage Jenkins

My Views

Credentials

Build Queue

Running Bots

AllRunning+

| S | Name | Last Success ↑ | Last Failure |
|---|---|------------------------------------|------------------------------------|
|  | ProteinBot_homo_sapiens | 1 day 21 hr - #12 | N/A |
|  | GOBot_bigmern | 2 days 15 hr - #15 | 9 days 15 hr - #14 |
|  | GeneBot_Homo_sapiens | 2 days 19 hr - #25 | 2 days 20 hr - #24 |
|  | Disease_Ontology | 2 days 23 hr - #11 | 4 days 13 hr - #8 |
|  | GeneDiseaseBot | 2 days 23 hr - #9 | 1 mo 6 days - #2 |

BRAF V600E (Q21851559)

genetic variant

VAL600GLU | V600E | RS113488022

 edit

▼ In more languages

| Language | Label | Description | Also known as |
|--------------|------------------|------------------------|-----------------------------------|
| English | BRAF V600E | genetic variant | VAL600GLU
V600E
RS113488022 |
| German | No label defined | No description defined | |
| French | No label defined | No description defined | |
| Dutch | No label defined | gen variant | |
| Sranan Tongo | No label defined | No description defined | |

All entered languages

positive therapeutic predictor



Sorafenib / Panitumumab combination therapy

 edit

medical condition treated

colorectal cancer

determination method

CIViC evidence level D



rating

CIViC 3-star trust rating

▼ 1 reference

curator

CIViC database

retrieved

31 October 2017

reference URL

<https://civic.genome.wustl.edu/links/evidence/89>

stated in

Wild-type BRAF is required for response to panitumumab or cetuximab in metastatic colorectal cancer.

Wild-type BRAF is required for response to panitumumab or cetuximab in metastatic colorectal cancer. (Q27851456)

scientific article

 [edit](#)

[In more languages](#)

| Language | Label | Description | Also known as |
|--------------|--|---|---------------|
| English | Wild-type BRAF is required for response to panitumumab or cetuximab in metastatic colorectal cancer. | scientific article | |
| German | No label defined | wissenschaftlicher Artikel | |
| French | No label defined | article scientifique | |
| Dutch | Wild-type BRAF is required for response to panitumumab or cetuximab in metastatic colorectal cancer. | wetenschappelijk artikel (gepubliceerd op 2008/12/10) | |
| Sranan Tongo | No label defined | No description defined | |

All entered languages

Statements

instance of



scholarly article

[1 reference](#)

 [edit](#)

[+ add value](#)

title



Wild-type BRAF is required for response to panitumumab or cetuximab in metastatic colorectal cancer. (English)

[1 reference](#)

 [edit](#)

[+ add value](#)

author



Federica Di Nicolantonio

series ordinal1

 [edit](#)

Wikipedia (0 entries)  [edit](#)

Wikibooks (0 entries)  [edit](#)

Wikinews (0 entries)  [edit](#)

Wikiquote (0 entries)  [edit](#)

Wikisource (0 entries)  [edit](#)

Wikiversity (0 entries)  [edit](#)

Wikivoyage (0 entries)  [edit](#)

Wiktionary (0 entries)  [edit](#)

Other sites (0 entries)  [edit](#)

Welcome to WikiGenomes.org

A freely open, editable, and centralized model organism database
for the biological research community.

powered by Wikidata

Organism Search:

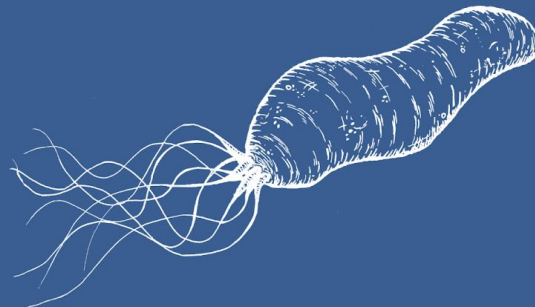
genome search

Start typing the name of an organism to continue or start by clicking one of the example organism links below.

[Helicobacter pylori 26695](#)

[Chlamydia trachomatis 434/BU](#)

[Listeria monocytogenes EGD-e](#)



[About WikiGenomes](#)

[Help](#)

[Source](#)

[Terms of Use](#)

[Contact](#)

Reactions (0)

EC Number

Reaction(s)

Reference

No data

Related Publications

Pathogenesis of *Helicobacter pylori* Infection.

Helicobacter

Sgouras DN *et. al* 2015

PMID: 26372819

Differences in genome content among *Helicobacter pylori* isolates from patients with gastritis, duodenal ulcer, or gastric cancer reveal novel disease-associated genes.

Infect Immun

Romo-González C *et. al* 2009

PMID: 19237517

5. Getting involved

We need your help

Wikidata contributor

Wikimedia contributor

Librarian

Author

Domain expert

Scholarly publisher

Metadata provider

Digital collection curator

Student

{ } wikicite

Vienna, 23-25 May 2017



STEPHEN LAPORTE / CC BY

{ } wikicite

San Francisco Bay Area, 27-29 November 2018

Bay Bridge by Tehani Schroeder • flic.kr/p/oFz47p • CC BY

Thank you

[m:WikiCite](#) • [@WikiCite](#) • [wikicite-discuss](#)