Basic Training 2023 for PhD students

Web of Science

Nagoya University Graduate School of Medicine
Medical Library
Ext： 2509

E-mail： med@nul.nagoya-u.ac.jp

Nobuyuki Hamajima, MD, PhD, MPH

Emeritus Professor, Nagoya University

Advisor, Kishokai Medical Corporation

※As of 2021

Contents

Contents

What is the WoS Core Collection?

- Contains information on articles from top journals
- Covers humanities, social sciences, and natural sciences
- Contains conference proceedings and technical books
- Citation information = bibliographic information of references and mutual links
- Entrance to JCR, EndNote basic
- No limit on the number of accesses
- Can be accessed from off-campus (THERS account/required)

Types of citation information

- Cited references
  - List of references of each article
- Citations
  - List of papers that cited each article
  - How the research were evolved.
- Related records
  - Closely related research

Comparison with PubMed

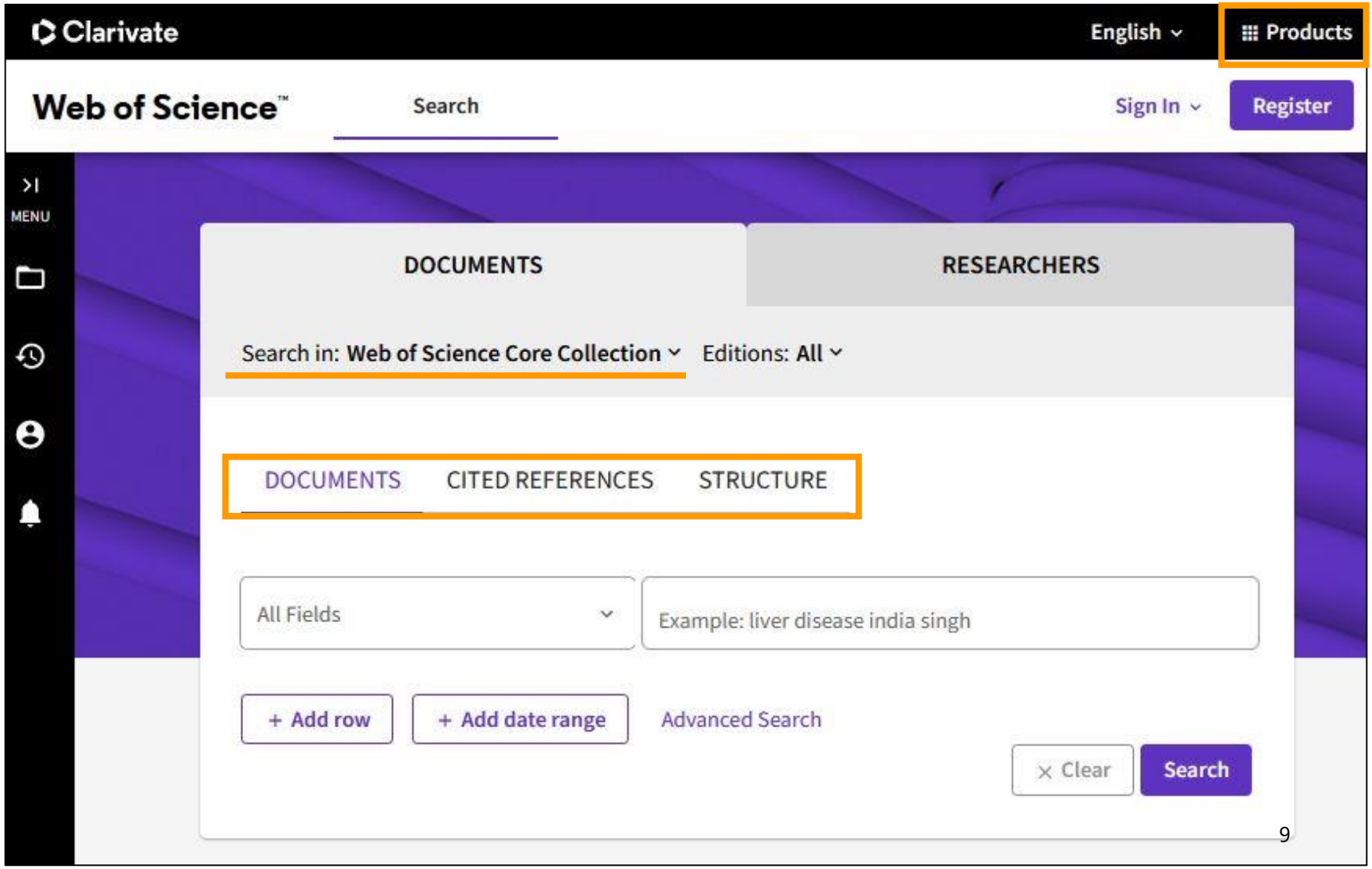
	PubMed	Web of Science
Field	Biomedical, Life sciences	All fields
Period	1946～	1900～
Number of Journals	About 5,200	All fields: About 12,000 Biomedical: About 3,800
Contents	Information on articles published in academic journals	Information on articles published in the selected top journals
Features	**Thesaurus** search and medical field-specific refinement	Search using a wealth of **citation information**

How do you use it?

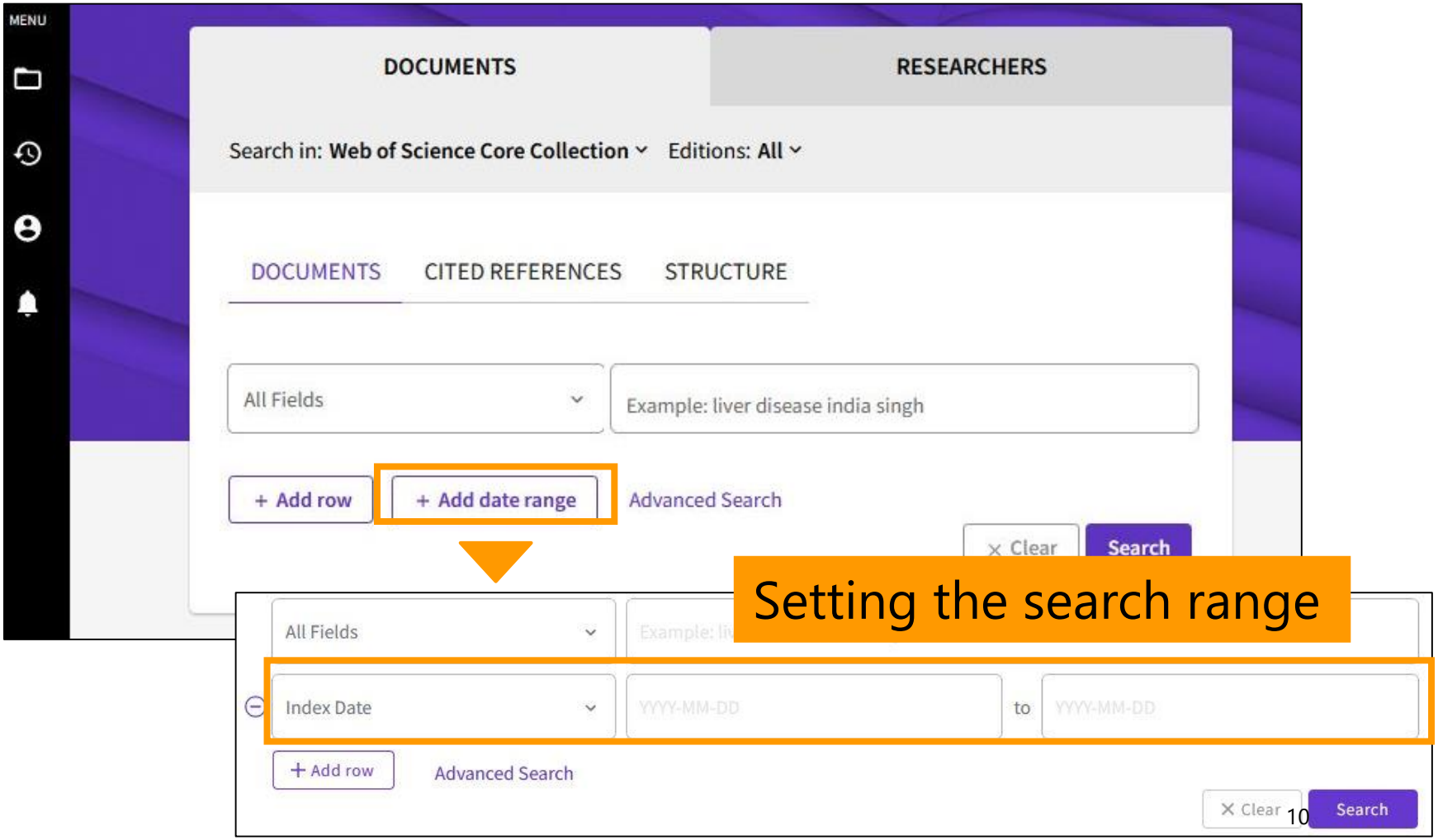
PubMed	Web of Science
✓ Search without omission ✓ Systematic search	✓ Find important references ✓ Tracking the "After" of Research ✓ Conducting interdisciplinary research

Contents

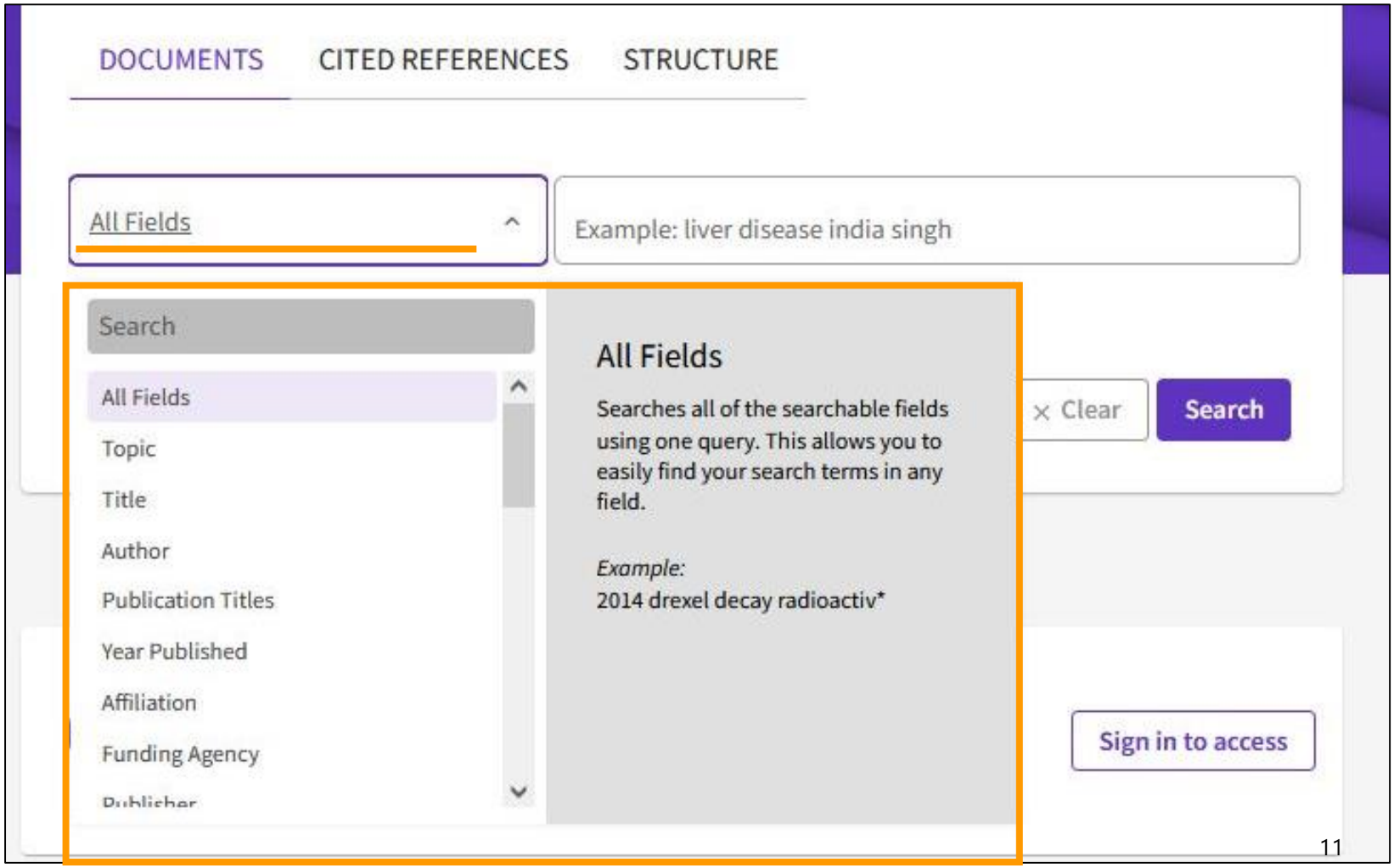
Setting search conditions



Setting search conditions



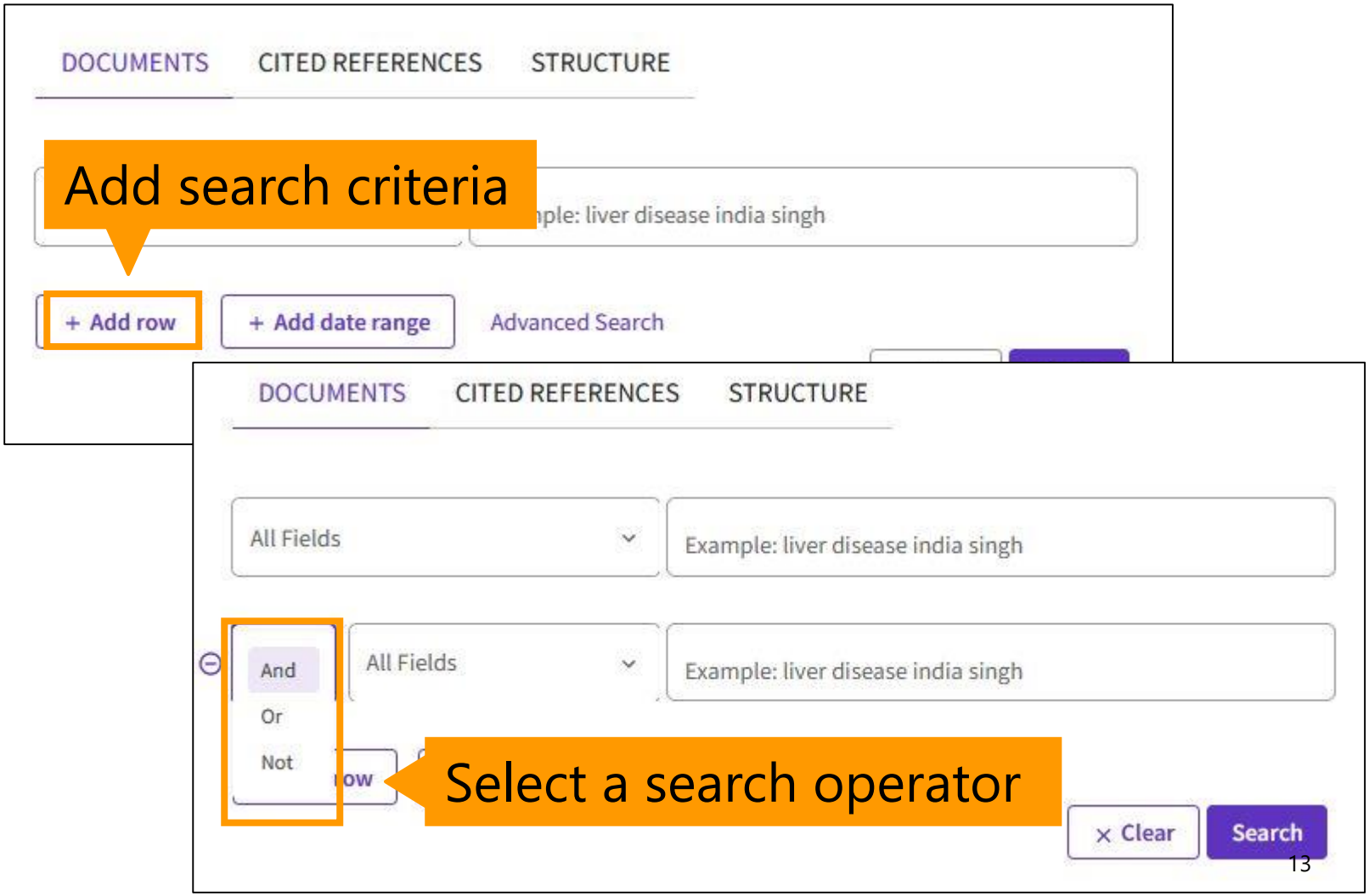
Setting search conditions



Setting search conditions

Examples	
Topic	Title, abstract, author keywords, and Keywords Plus.
Author	Authors and Group Author.
Publication Titles	Journal titles, book titles, proceefings titles, and more.
Affiliation	Organization names and/or their name variants.
DOI/PubMed ID	Specific article.

Setting search conditions



Points to search

- There is no thesaurus.
  - Automatic processing of conjugations and spelling variations *Topic, title only
  - Use synonyms

- Search operators
  - Add synonyms with OR
  - Exclude unnecessary words with NOT

For more information, click the "Help" button.

Points to search

- To search for an exact phrase, enclose the phrase **in quotation marks** *Topic, title only
  - **"prenatal exposure"**→ prenatal alcohol exposure is not a hit

- Use wildcards
  - Automatic processing of conjugations is disabled for phrase search.
  - Add an **asterisk (*)** before, during, or after the search term.

Wildcard Characters (Truncation)

Symbol	Retrieves	Examples	
*	Zero or more characters	prenatal*	• prenatal**ly**
		*natal	• **neo**natal • **peri**natal
		p*natal	• p**re**natal • p**eri**natal
?	One character only	organi?ation	• organi**z**ation • organi**s**ation
$	Zero or one character	“model$ing”	• modeling • model**l**ing

Author Search / Publication Titles Search

- Author
  - **Enter the last name first followed by a space and the author’s initials*.**
  - ex）chitwood　w*
  - If necessary, add the name of the author's organization

- Publication Titles
  - Enter the full title or an abbreviation and add * at the end.
  - ex) cancer research or can* res*
  - You can select from the index.

Search example

Try to find research articles on iPS cells.

- Set the search field to **"topic"**
- iPS cell = induced pluripotent stem cell
- Specify the **exact phrases**
- To search for both “ips cell" and “ips cells", add an **asterisk (*)** at the end
- Connecting phrases with the search operator (**OR**)

“ips cell*” OR “induced pluripotent stem cell*”

Results

Search in: **Web of Science Core Collection** Editions: **All**

DOCUMENTS AUTHORS CITED REFERENCES STRUCTURE

21,229 results from Web of Science Core Collection for:

"ips cell*"OR"induced pluripotent stem cell*" (Topic)

Analyze Results | Citation Report | Create Alert

Copy query link

Publications | You may also like...

Refine results

Search within results for...

Quick Filters

- Highly Cited Papers 220
- Hot Papers 4
- Review Articles 3,472
- Early Access 132
- Open Access 13,421
- Associated Data 1,091

0/21,229 | Add To Marked List | Export | Relevance | 1 of 425

1 Reprogramming of Primary Human Cells to Induced Pluripotent Stem Cells Using Sendai Virus

Draper, JM and Vivian, JL

2020 | TRANSGENIC MOUSE: METHODS AND PROTOCOLS 2066 , pp.217-234

Induced pluripotent stem (iPS) cells are important tools for studying differentiation and for use in patient-specific disease modeling. We present a detailed method for the reprogramming of primary ... Show more

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1 Citation

10 References

Related records

Results

Get the full text

Click to add to your Marked List

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- Save in reference management tool
- Print or email
- Save text

Induction of pluripotent stem cells from mouse

Associated Data

By: Takahashi, K (Takahashi, Kazutoshi) ; Yamanaka, S (Yamar

View Web of Science ResearcherID and ORCID (provided by

CELL

Volume: 126 **Issue:** 4 **Page:** 663-676

DOI: 10.1016/j.cell.2006.07.024

Published: AUG 25 2006

Document Type: Article

Abstract

Differentiated cells can be reprogrammed to an embryonic-like state by transfer of nuclear contents into oocytes or by fusion with embryonic stem (ES) cells. Little is known about factors that induce this reprogramming. Here, we demonstrate induction of pluripotent stem cells from mouse embryonic or adult fibroblasts by introducing four factors, Oct3/4, Sox2, c-Myc, and Klf4, under ES cell culture conditions. Unexpectedly, Nanog was dispensable. These cells, which we designated iPS (induced pluripotent stem) cells, exhibit the morphology and growth properties of ES cells and express ES cell marker genes. Subcutaneous transplantation of iPS cells into nude mice resulted in tumors containing a variety of tissues from all three germ layers. Following injection into blastocysts, iPS cells contributed to mouse embryonic development. These data demonstrate that pluripotent stem cells can be directly generated from fibroblast cultures by the addition of only a few defined factors.

All Citation

16,754 In A

+ See more

Cited Refere

50

View Relatec

Advanced Search Query Builder

Add terms to the query preview

All Fields | Example: liver disease india singh | Add to query

More options

Search by combining histories

Search Help

Query Preview

AND, OR, NOT

Field Tags :

Enter or edit your query here. You can also combine previous searches e.g. #5 AND #2

+ Add date range

× Clear

Search

- TS=Topic
- TI=Title
- AB=Abstract
- AU=[Author]
- AI=Author Identifiers
- AK=Author Keywords
- GP=[Group Author]
- ED=Editor
- KP=Keyword Plus ®
- SO=[Publication Titles]
- DO=DOI
- PY=Year Published
- CF=Conference
- AD=Address
- OG=[Affiliation]
- OO=Organization
- SG=Suborganization
- SA=Street Address
- CI=City
- PS=Province/State
- CU=Country/Region
- ZP=Zip/Postal Code
- FO=Funding Agency
- FG=Grant Number
- FD=Funding Details
- FT=Funding Text
- SU=Research Area
- WC=Web of Science Categories
- IS= ISSN/ISBN
- UT=Accession Number
- PMID=PubMed ID
- DOP=Publication Date
- PUBL=Publisher
- ALL=All Fields
- FPY=Final publication year

Session Queries

Build a new query based on your searches in this session.

2/2 | Combine Sets | Export | Clear History

2	**transplantation** (Topic)	568,774	Add to query	
1	**"ips cell*"OR"induced pluripotent stem cell*"** (Topic)	24,702	Add to query	

Quick Filters

Quick Filters

- Highly Cited Papers 220
- Hot Papers 4
- Review Articles 3,472
- Early Access 132
- Open Access 13,421
- Associated Data 1,091

Publication Years

- 2022 3
- 2021 1,898
- 2020 2,509
- 2019 2,394
- 2018 2,107

See all

Document Types

- Articles
- Review Articles
- Meeting Abstracts
- Book Chapters
- Editorial Materials

See all

1 Induction of pluripotent s
and adult fibroblast cultu
Takahashi, K and Yamanaka, S
Aug 25 2006 | CELL 126 (4) , pp.663
Differentiated cells can be reprog
transfer of nuclear contents into
(ES) cells. Little is known about f
NULink FIND FULL TEXT Free Full Text

2 Induction of pluripotent s
fibroblasts by defined fac
Takahashi, K; Tanabe, K; (...); Yam
Nov 30 2007 | CELL 131 (5) , pp.861
Successful reprogramming of dif
pluripotent state would allow cre
cells. We previously reported ger
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Article	17,549	Early Access	164
Review Article	4,015	Correction	147
Meeting Abstract	3,278	Letter	142
Book Chapters	799	News Item	47
Editorial Material	737	Retracted Publication	16
Proceeding Paper	312	Retraction	14

Other than this, Authors, Affiliations, Publication Titles, etc.

Check the box and click "Refine" or "Exclude"

Contents

Find important articles

26,120 results from Web of Science Core Collection for:

"ips cell*"OR"induced pluripotent stem cell*" (All Fields)

Analyze Results | Citation Report | Create Alert

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Publications | You may also like...

Refine results

Search within results...

Filter by Marked List

Quick Filters

- Highly Cited Papers 224
- Hot Papers 1
- Review Article 4,015
- Early Access 164
- Open Access 16,997
- Associated Data 1,269
- Enriched Cited References 2,489

Citation Topics Meso

- 1.102 Stem Cell Research 10,365

0/26,120 | Add To Marked List | Export | Sort by: Background: Highest first | 1 of 523

1 Induction of pluripote

Takahashi, K and Yamanaka,

Aug 25 2006 | CELL 126

Differentiated cells can be re
stem (ES) cells. Little is know
mouse embryonic or adult fi

Free Full Text Fr

17,192 Citations

50 References

Related records

2 Induction of pluripote

Takahashi, K; Tanabe, K; (...);

Nov 30 2007 | CELL 131

Successful reprogramming o
stem cells. We previously rep
by transduction of four defin

13,603 Citations

30 References

Relevance
Recently added
New Citation class
Date: newest first
Date: oldest first
Citations: highest first
Citations: lowest first
Usage (all time): most first
Usage (last 180 days): most first
Conference title: A to Z
Conference title: Z to A
First author name: A to Z
First author name: Z to A
Publication title: A to Z
Publication title: Z to A

Background: Highest first
Basis: Highest first
Support: Highest first
Differ: Highest first
Discuss: Highest first

Find important articles

クラリベイト・アナリティクスの Highly Cited Researchers に本学から5名が選ばれました

2019年12月13日

Highly Cited Researchers は、クラリベイト・アナリティクスが世界中で引用された回数の多い論文の著者（高被引用論文著者）を研究分野ごとに選出したものです。2019年は、約60か国21分野で約6,200名の研究者が、世界的に最も影響のある研究を行っている研究者としてリストアップされています。

本学からは、以下の5名が選ばれました。

Chemistry **伊丹　健一郎（Kenichiro Itami Kenichiro）**	トランスフォーマティブ生命分子研究所長・教授
Cross-Field **須藤　健悟（Kengo Sudo）**	環境学研究科教授
Plant&Animal Science **榊原　均（Hitoshi Sakakibara）**	生命農学研究科教授
Plant&Animal Science **松林　嘉克（Yoshikatsu Matsubayashi）**	理学研究科教授
Plant&Animal Science	

Highly Cited Papers & Hot Papers

21,229 results from Web of Science Core Collection for:

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- Early Access 132
- Open Access 13,421
- Associated Data 1,091

0/21,229 | Add To Marked List | Export | Relevance | 1 of 425

1 Reprogramming of Primary Human Cells to Induced Pluripotent Stem Cells Using Sendai Virus

Draper, JM and Vivian, JL

2020 | TRANSGENIC MOUSE: METHODS AND PROTOCOLS 2066 , pp.217-234

Induced pluripotent stem (iPS) cells are important tools for studying differentiation and for use in patient-specific disease modeling. We present a detailed method for the reprogramming of primary ... Show more

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1 Citation

10 References

Related records

Find important articles

Induction of pluripotent stem cells from mouse embryonic and adult fibroblast cultures by defined factors

Associated Data

By: Takahashi, K (Takahashi, Kazutoshi) ; Yamana

View Web of Science ResearcherID and OR

CELL

Volume: 126 Issue: 4 Page: 663-676
DOI: 10.1016/j.cell.2006.07.024
Published: AUG 25 2006
Indexed: 2006-08-25
Document Type: Article

Abstract

Differentiated cells can be reprogrammed to an e
with embryonic stem (ES) cells. Little is known about factors that induce this reprogramming. Here, we demonstrate induction of pluripotent stem cells from mouse embryonic or adult fibroblasts by introducing four factors, Oct3/4, Sox2, c-Myc, and Klf4, under ES cell culture conditions. Unexpectedly, Nanog was dispensable. These c
pluripotent stem) cells, exhibit the morphology and growth properties of ES cells
Subcutaneous transplantation of iPS cells into nude mice resulted in tumors cont
layers. Following injection into blastocysts, iPS cells contributed to mouse embry
that pluripotent stem cells can be directly generated from fibroblast cultures by t

Keywords

Keywords Plus: TRANSCRIPTION FACTOR KLF4; SELF-RENEWAL; C-MYC; SOMAT
BETA-CATENIN; DIFFERENTIATION; EXPRESSION; NANOG

Author Information

Citations

Number of records that cited current one

Cited References

Number of references that current record cites

Citation Network

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17,192
Citations

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19,052
Times Cited in All Databases

50
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Citing items by classification New

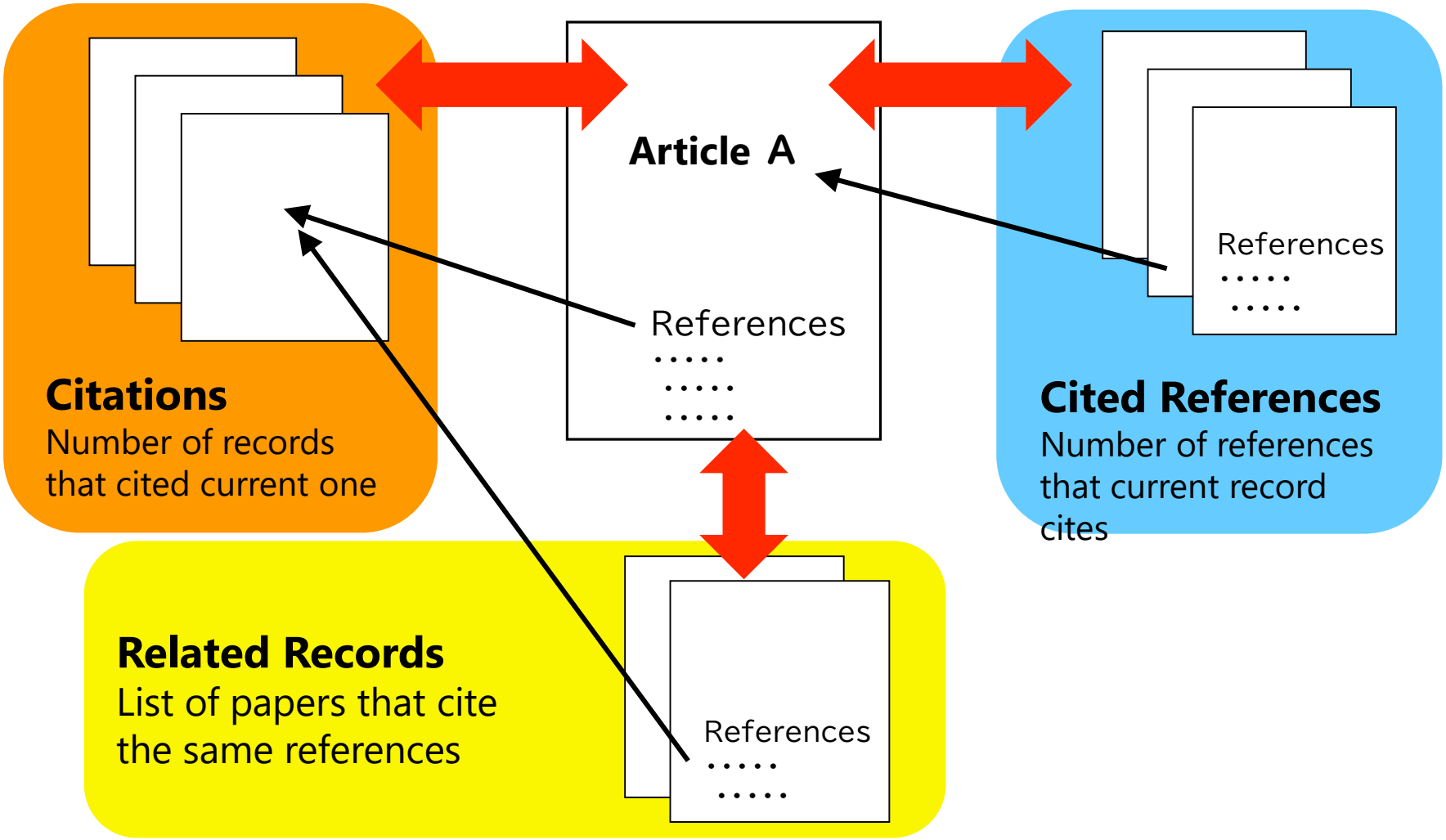
Breakdown of how this article has been mentioned, based available

Related Records

List of papers that cite the same references

Differ 1

Understand the research process



The past current The future

Monitor the latest research

Induction of pluripotent stem cells from mouse embryonic and adult fibroblast cultures by defined factors

Associated Data

By: Takahashi, K (Takahashi, Kaz

View Web of Science Researc

CELL

Volume: 126 Issue: 4 Page: 6

DOI: 10.1016/j.cell.2006.07.024

Published: AUG 25 2006

Indexed: 2006-08-25

Document Type: Article

Keep up to date with information that matters to you by setting up search and citation alerts.

Abstract

Differentiated cells can be reprogrammed to an embryonic-like state by transfer of nuclear contents into oocytes or by fusion with embryonic stem (ES) cells. Little is known about factors that induce this reprogramming. Here, we demonstrate induction of pluripotent stem cells from mouse embryonic or adult fibroblasts by introducing four factors, Oct3/4, Sox2, c-Myc, and Klf4, under ES cell culture conditions. Unexpectedly, Nanog was dispensable. These cells, which we designated iPS (induced pluripotent stem) cells, exhibit the morphology and growth properties of ES cells and express ES cell marker genes. Subcutaneous transplantation of iPS cells into nude mice resulted in tumors containing a variety of tissues from all three germ layers. Following injection into blastocysts, iPS cells contributed to mouse embryonic development. These data demonstrate that pluripotent stem cells can be directly generated from fibroblast cultures by the addition of only a few defined factors.

Keywords

Keywords Plus: TRANSCRIPTION FACTOR KLF4; SELF-RENEWAL; C-MYC; SOMATIC-CELLS; ES CELLS; TUMOR-SUPPRESSOR; BETA-CATENIN; DIFFERENTIATION; EXPRESSION; NANOG

Author Information

Citation Network

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17,192
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Create citation alert

19,052
Times Cited in All Databases

50
Cited References

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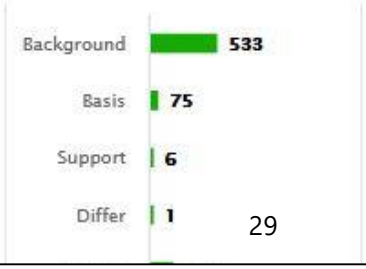
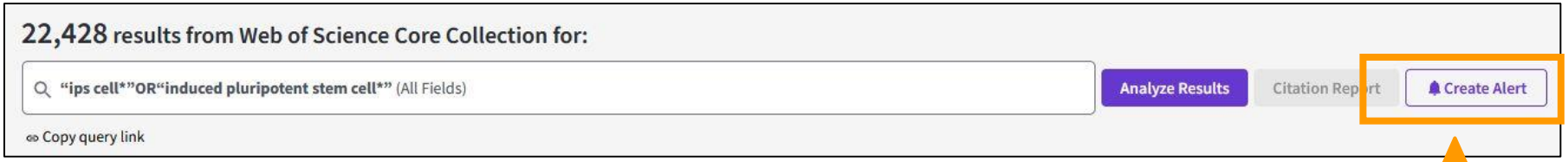
Citing items by classification New

Breakdown of how this article has been mentioned, based on available citation context data and snippets from 722 citing item(s).



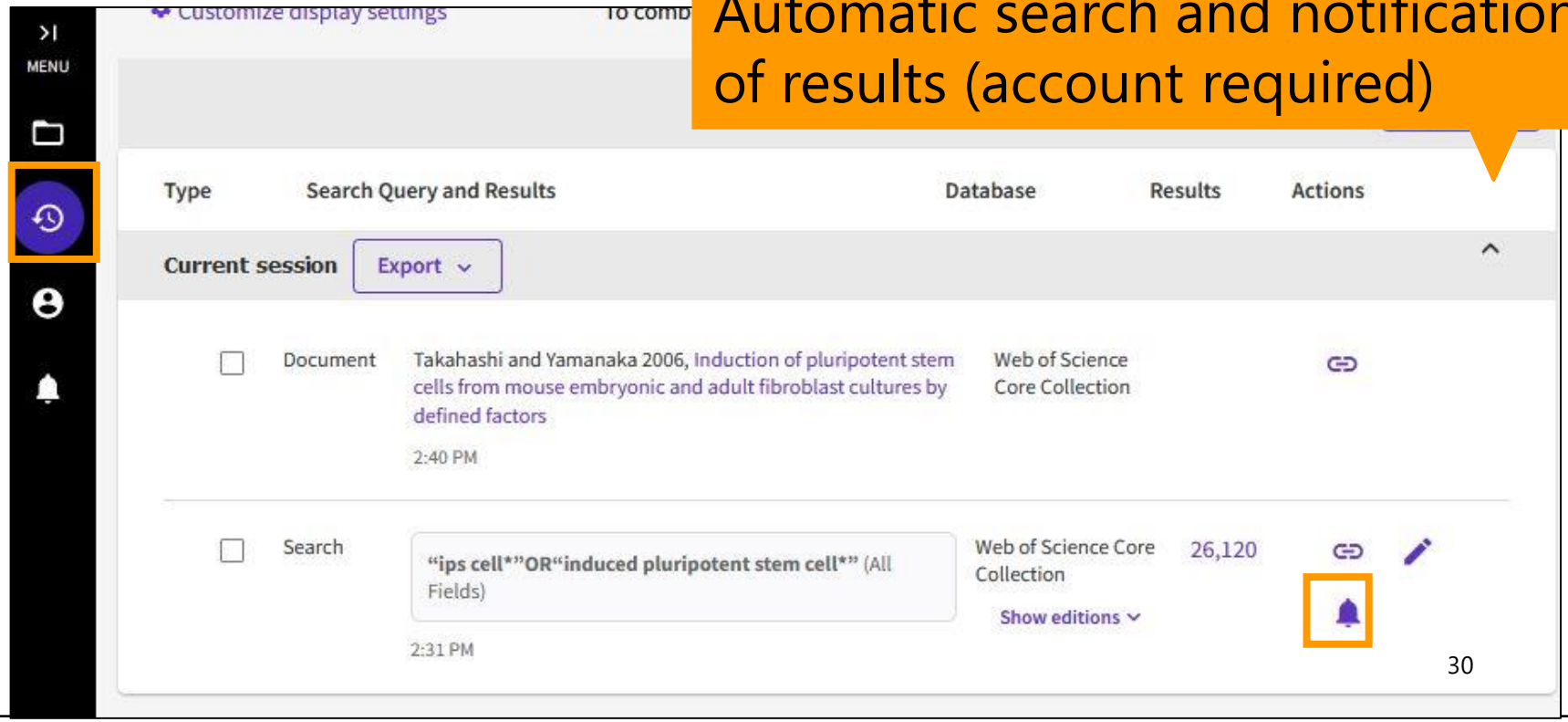
Monitor the latest research

Search result ↓



"History"↓

Automatic search and notification of results (account required)



Analyze research trends

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- Open Access 13,421
- Associated Data 1,091

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2020 | TRANSGENIC MOUSE: METHODS AND PROTOCOLS 2066 , pp.217-234

Induced pluripotent stem (iPS) cells are important tools for studying differentiation and for use in patient-specific disease modeling. We present a detailed method for the reprogramming of primary ... Show more

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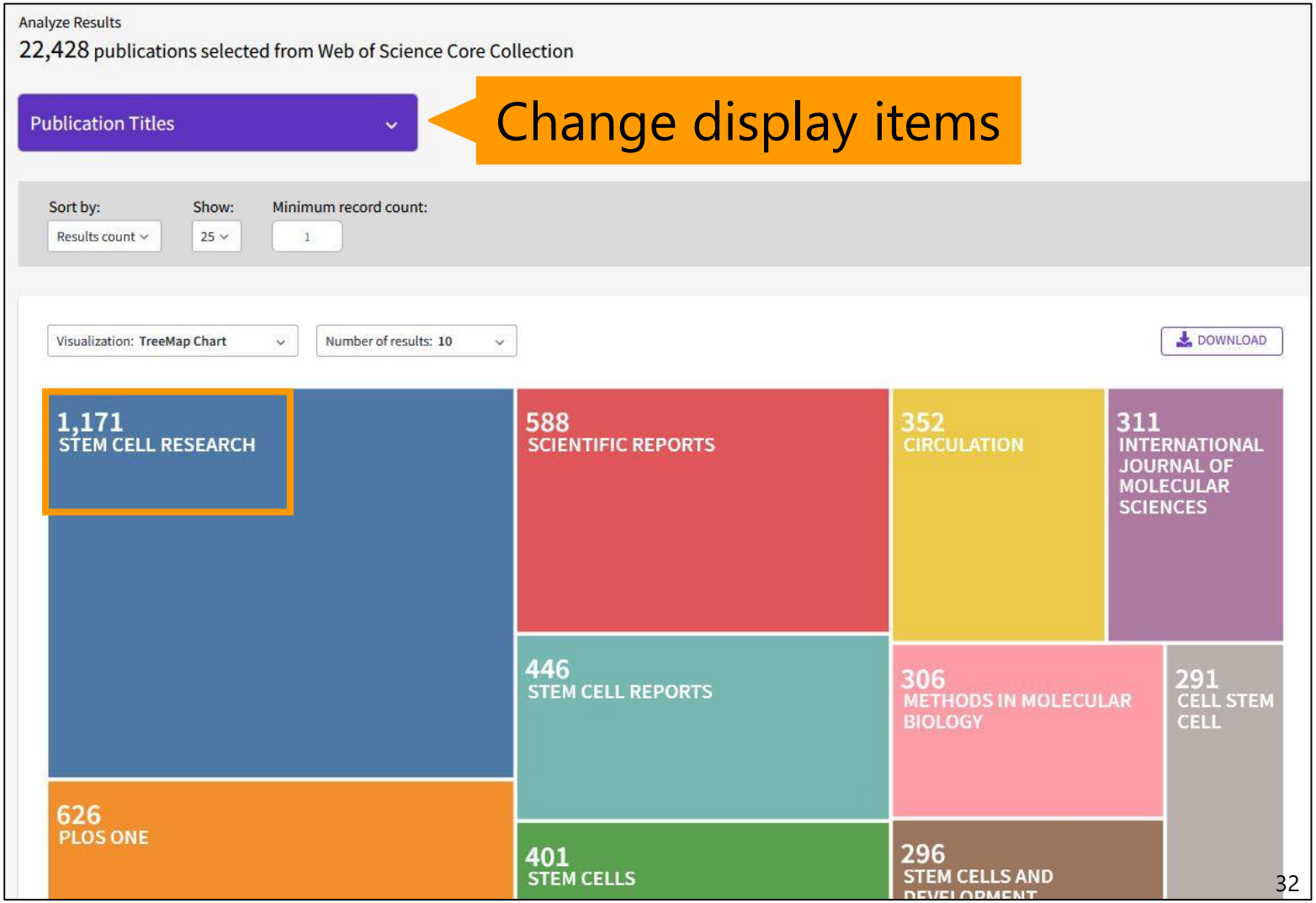
Analyze research trends



Contents

What is Impact Factor (IF)?

- **The Journal Impact Factor (JIF)** is a ratio which divides a journal's received citations by a count of its published articles.

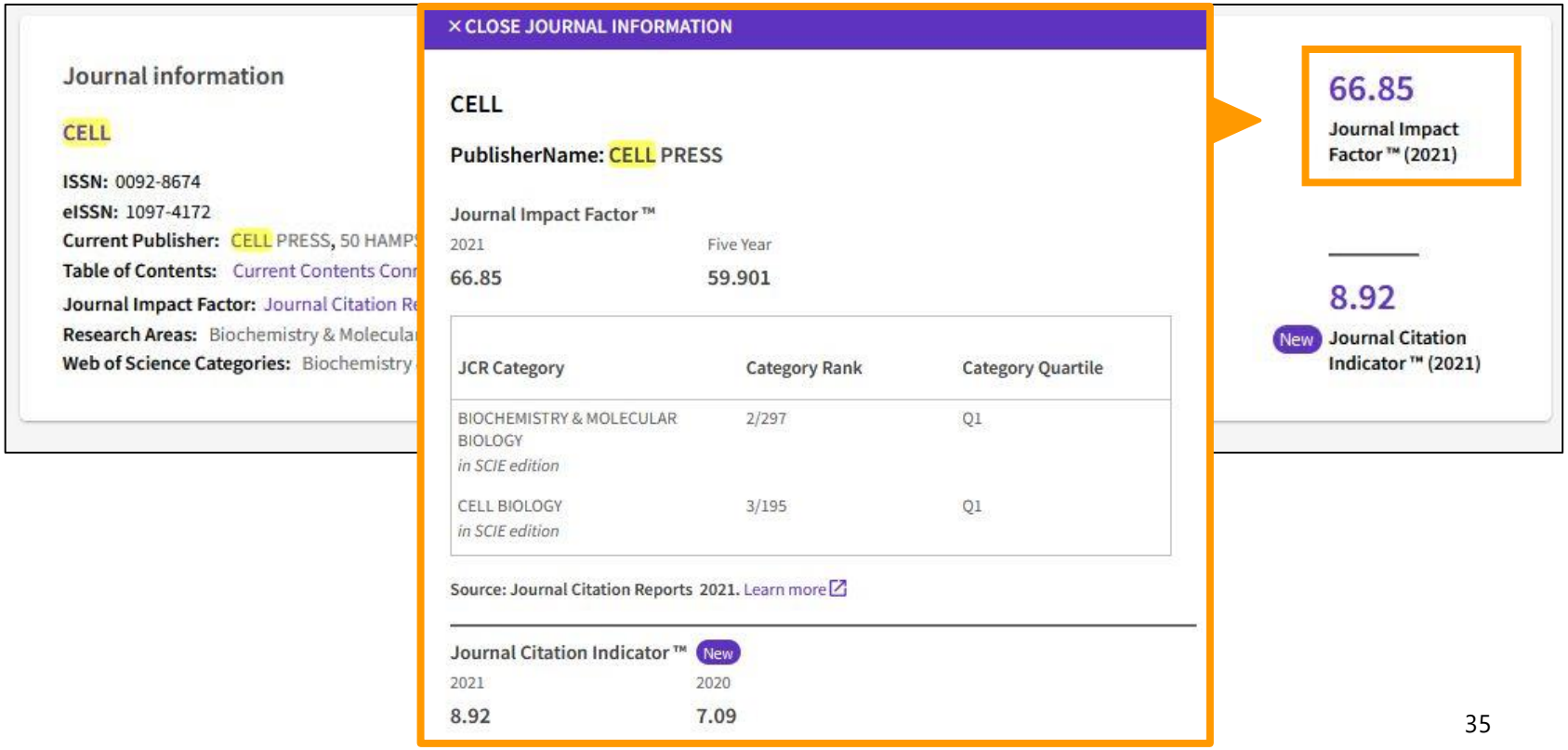
- JIF is calculated using the following metrics (example for 2020):

$$= \frac{\text{Citations in 2020 to items published in 2018 + 2019}}{\text{Number of citable items in 2018 + 2019}}$$

※ Changes in journal name or ISSN are considered as a new journal.
※ Items like editorials, letters, and news items are excluded from the denominator.

Using the WoS

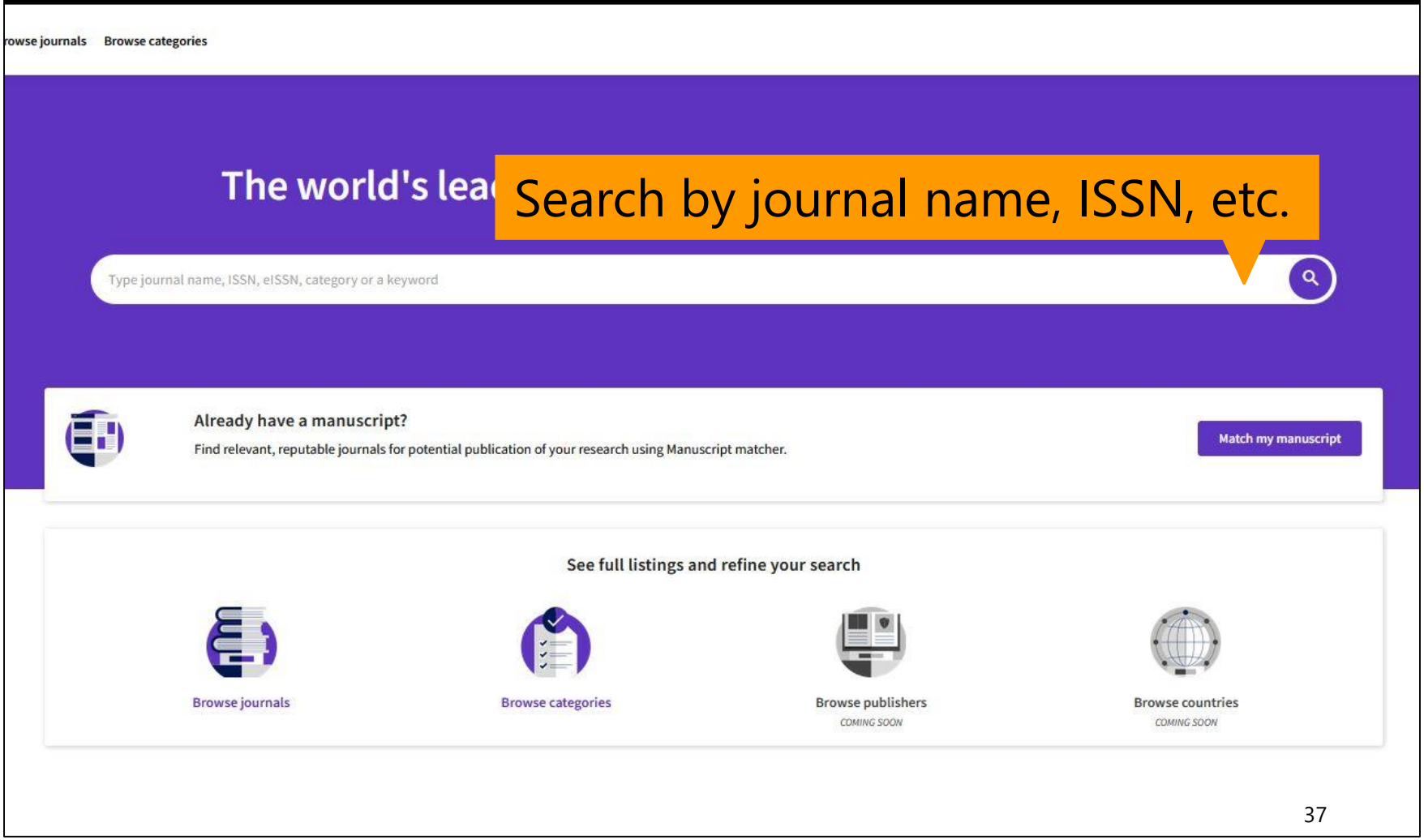
- From the search results screen or the articles details screen



Using the JCR

- Various indicators such as IF
- Data updated annually (around June or July)
- Data available since 1997.
- Before 1996: CD-ROMs and booklets from the Central Library.

Using the JCR



Using the JCR

- Click on “Journals".

Journal Citation Reports™ | Journals | Categories | Publishers | Countries/Regions | My favorites | Sign In | Register

21,494 journals

Journal name/abbreviation, ISSN/eISSN, category, publisher, country/region

Copy query link | Export

Indicators: Default | Customize

Filter

Filter

	ISSN	eISSN	Category		Total Citations			2021 JIF
CA-A CANCER JOURNAL FOR CLINICIANS	0007-9235	1542-4863	ONCOLOGY - SCIE	61,124	286.130	Q1	68.74	89.16 %
LANCET	0140-6736	1474-547X	MEDICINE, GENERAL & INTERNAL - SCIE	403,222	202.731	Q1	21.87	21.98 %
NEW ENGLAND JOURNAL OF MEDICINE	0028-4793	1533-4406	MEDICINE, GENERAL & INTERNAL - SCIE	506,071	176.082	Q1	22.47	0.00 %
JAMA-JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION	0098-7484	1538-3598	MEDICINE, GENERAL & INTERNAL - SCIE	242,430	157.375	Q1	10.46	1.49 %
NATURE REVIEWS MOLECULAR CELL BIOLOGY	1471-0072	1471-0080	CELL BIOLOGY - SCIE	66,072	113.915	Q1	8.39	2.16 %
NATURE REVIEWS DRUG DISCOVERY	1474-1776	1474-1784	Multiple	47,615	112.288	Q1	9.76	1.69 %

Using the JCR

- Research the most influential journals in pediatrics.

Filter

Categories (Web of Science)

Categories

Journal name	ISSN	eISSN	Category	Total Citations	2020 JIF	JIF Quartile	2020 JCI	% of OA Gold
JAMA Pediatrics	2168-6203	2168-6211	PEDIATRICS - SCIE	14,720	16.193	Q1	5.86	9.78 %
Lancet Child & Adolescent Health	2352-4642	2352-4642	PEDIATRICS - SCIE	3,501	11.288	Q1	3.70	14.83 %
JOURNAL OF THE AMERICAN ACADEMY OF CHILD AND ADOLESCENT PSYCHIATRY	0890-8567	1527-5418	PEDIATRICS - SCIE	25,046	8.829	Q1	2.30	11.43 %
PEDIATRICS	0031-4005	1098-4275	PEDIATRICS - SCIE	95,966	7.124	Q1	2.66	0.31 %
PEDIATRIC ALLERGY AND IMMUNOLOGY	0905-6157	1399-3038	PEDIATRICS - SCIE	5,778	6.377	Q1	1.53	13.39 %
Archives of Disease in Childhood-Fetal and Neonatal Edition	1359-2998	1468-2052	PEDIATRICS - SCIE	7,952	5.747	Q1	2.47	18.94 %
DEVELOPMENTAL MEDICINE AND CHILD NEUROLOGY	0012-1622	1469-8749	PEDIATRICS - SCIE	16,571	5.449	Q1	1.70	17.12 %
JOURNAL OF ADOLESCENT HEALTH	1054-139X	1879-1972	PEDIATRICS - SCIE	20,914	5.012	Q1	1.58	12.11 %

Reset

Apply

Using the JCR

- Change of IF

Browse journals > Journal profile

Journal's performance

Journal Impact Factor

The Journal Impact Factor (JIF) is a journal-level metric calculated from data indexed in the Web of Science Core Collection. It should be used with careful attention to the many factors that influence citation rates, such as the volume of publication and citations characteristics o
subject area and type of journal. The Journal Impact Factor can complement expert opinion and informed peer review. In the case of academic evaluation for tenure, it is inappropriate to use a journal-level metric as a proxy measure for individual researchers, institutions, or ar
Learn more

2020 JOURNAL IMPACT FACTOR

16.193

View calculation

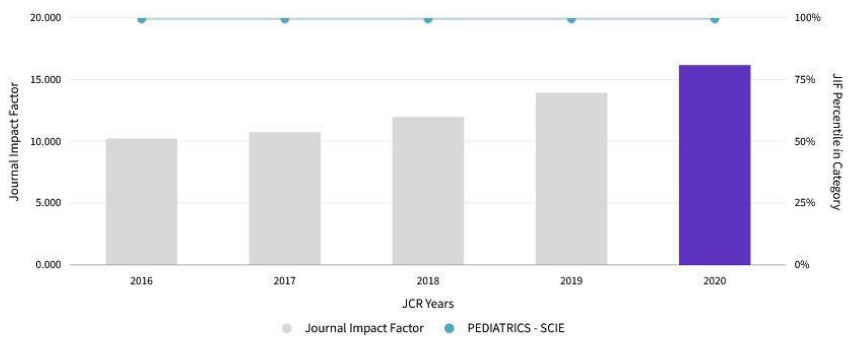
JOURNAL IMPACT FACTOR WITHOUT SELF CITATIONS

15.484

View calculation

Journal Impact Factor Trend 2020

Export



View all years

Journal Impact Factor contributing items

Citable items (223) | Citing S

TITLE

Prevalence of Adverse Childhood Experiences From the 2011-2014 Behavioral Risk Factor Surveillance System in 23 States

Rotavirus Vaccination and the Global Burden of Rotavirus Diarrhea Among Children Younger Than 5 Years

Prevalence of Multiple Forms of Sexting Behavior Among Youth A Systematic Review and Meta-analysis

Cognitive Outcomes of Children Born Extremely or Very Preterm Since the 1990s and Associated Risk Factors A Meta analysis and Meta-regression

Association Between Maternal Fluoride Exposure During Pregnancy and IQ Scores in Offspring in Canada

Diagnosis and Management of Mild Traumatic Brain Injury in Children A Systematic Review

Association Between Screen Time and Children's Performance on a Developmental Screening Test

Association of Noncigarette Tobacco Product Use With Future Cigarette Smoking Among Youth in the Population Assessment of Tobacco and Health (PATH) Study, 2013-2015

Summry

- Use the Web of Science
  - Multi-functional database with citation network
  - Contains selected journals in all fields
  - There is no thesaurus, so be careful with search terms.
  - Use functions for different stages and scenes of research.

- Find out the impact factor.
  - Check with WoS search results. Or search in JCR.
  - One way to evaluate a magazine. Also requires attention.

This is the last slide of “Web of Science”

Go on the next video.

If you have questions, please send them to med@nul.nagoya-u.ac.jp.