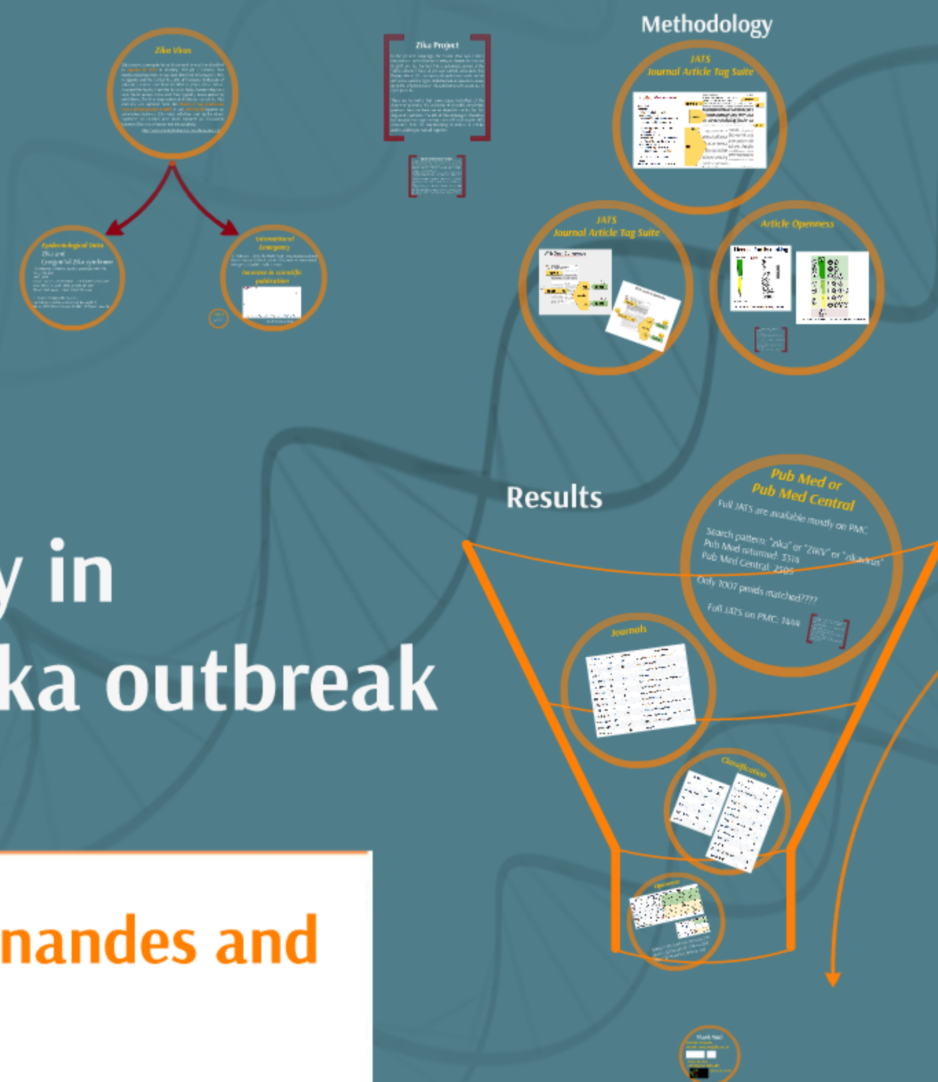
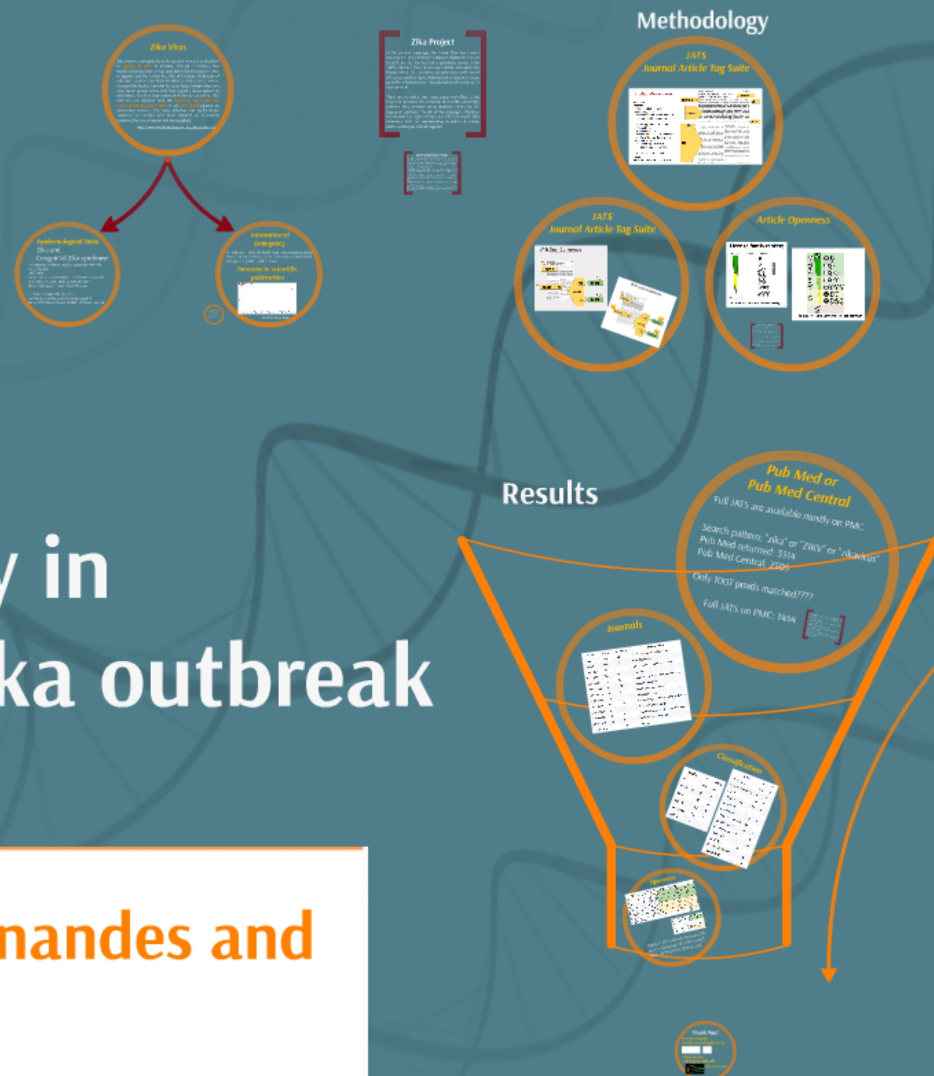


Open Access Coherence Study in publications related to the Zika outbreak

Peter Krauss, Jorge H. C. Fernandes and Ricardo Barros Sampaio



Open Access Coherence Study in publications related to the Zika outbreak

Peter Krauss, Jorge H. C. Fernandes and Ricardo Barros Sampaio

STI 2017 PARIS

Zika Virus

Zika virus is a mosquito-borne flavivirus that was first identified in **Uganda in 1947** in monkeys through a network that monitored yellow fever. It was later identified in humans in 1952 in Uganda and the United Republic of Tanzania. Outbreaks of Zika virus disease have been recorded in Africa, the Americas, Asia and the Pacific. From the 1960s to 1980s, human infections were found across Africa and Asia, typically accompanied by mild illness. The first large outbreak of disease caused by Zika infection was reported from the **Island of Yap (Federated States of Micronesia) in 2007**. In July **2015 Brazil** reported an association between Zika virus infection and Guillain-Barré syndrome. In October 2015 Brazil reported an association between Zika virus infection and microcephaly.

http://www.who.int/mediacentre/factsheets/zika/en/

Epidemiological Data

Zika and

Congenital Zika syndrome

1. Congenital syndrome possibly associated with Zika virus infection -
2015/2016
Brazil: 10,232 cases reported . :: Confirmed: 2,205 cases
Data from the last bulletin up to SE 26/2017
Brazil: 4,221 cases . :: Confirmed: 391 cases

2. Acute infection with Zika virus
Cumulative data for 2016 and up 06/26/2017
Brazil: 205,578 in 2016 and 13,353 in 2017 until June 26.

International Emergency

On February 1, 2016, the World Health Organization declared that the spread of the Zika virus (ZIKV) was an international emergency of public health concern.

Increase in scientific publication

SCOPUS Data Base

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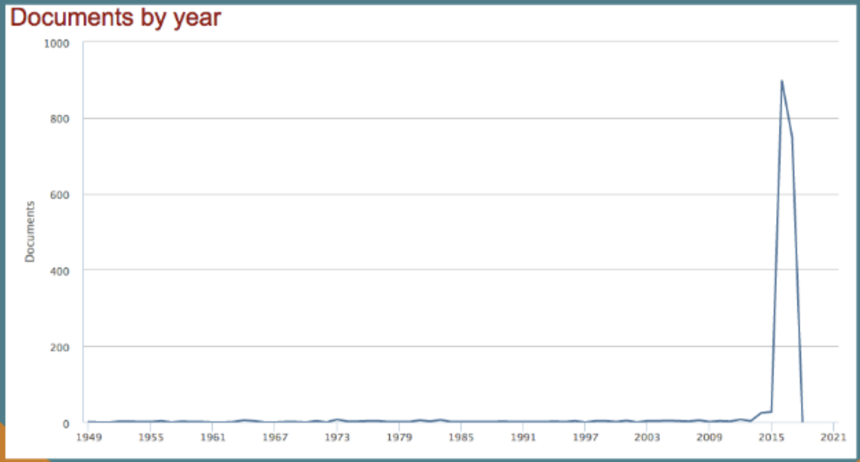


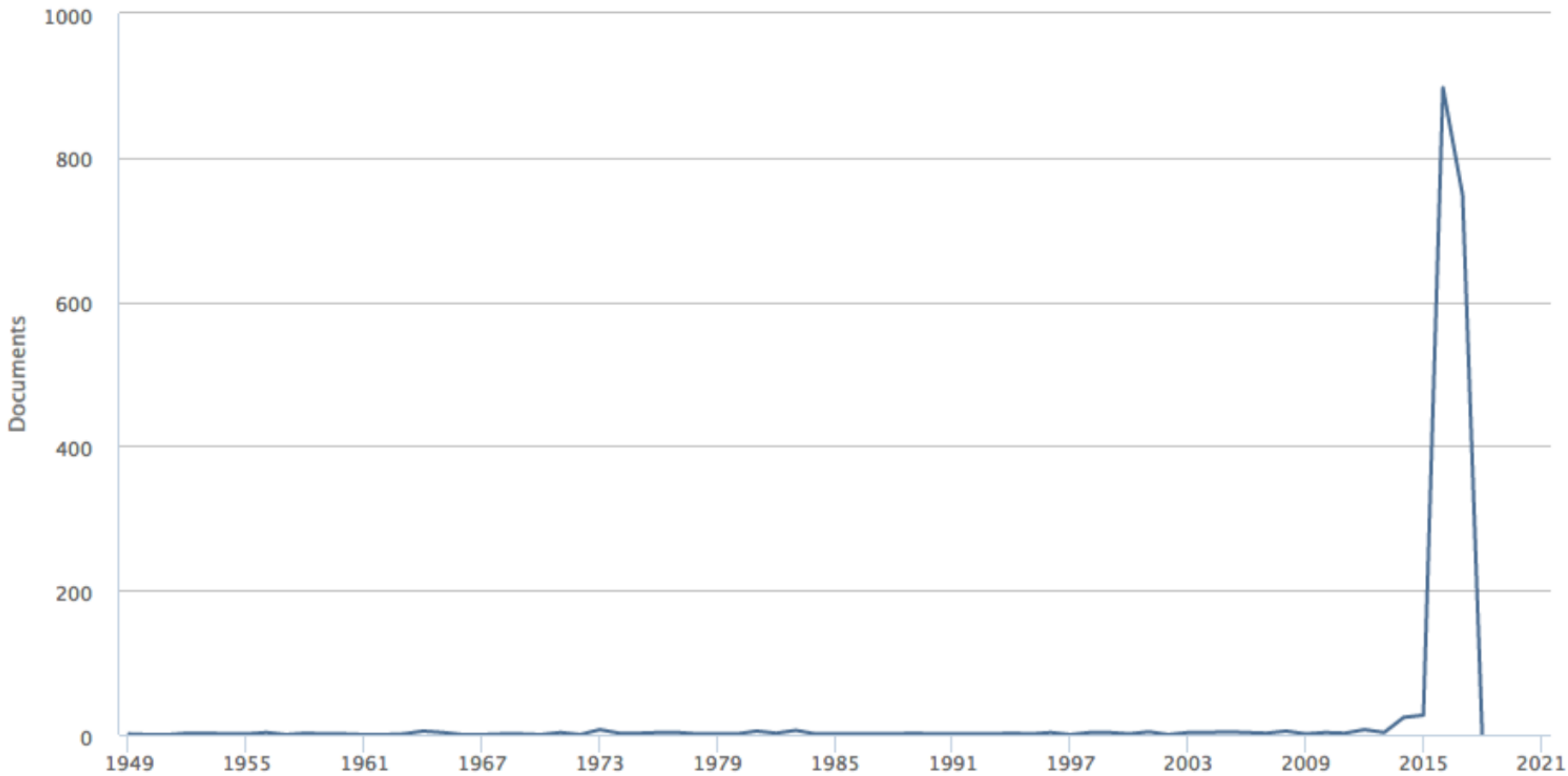
SCOPUS Data Base

Some journals offered fast tracking for scientific publications on zika

Fast Track for publications - The idea was to make research findings available to the public. Really!?!?

publication

Documents by year



SCOPUS Data Base

Some journals offered fast tracking for scientific publications on zika

Fast Track for publications -
The idea was to make research findings available to the public.
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Zika Project

In the present campaign, the theme Zika was chosen because it is one of the most relevant themes for Fiocruz in 2017, and for the fact that a systematic survey of the "JATS collection" has not yet been carried out around this theme. Also in 2017 an open data policy was implemented at Fiocruz, and during its implementation, questions arose as to the effectiveness of the publication of researches in open journals.

There are no works that prove cause and effect of the degree of openness of a collection of scientific knowledge, precisely because there are no objective metrics for this degree of openness. The aim of the campaign is therefore to calculate the degree of openness of this thematic JATS collection, both for benchmarking in individual articles and in articles journals all together.

Open Coherence Project

The OpenCoherence project (Krauss 2015 and 2016) has been built as a mini-framework, software and data, for the audit of the repositories of scientific and legislative knowledge, and for the recording of evidence (documents taken as samples) that reinforce the hypothesis Of work.
Within this context, the project aims to:

- Formalize opening metrics for the characterization of existing licenses
- To instrumentalize the characterization of the degree of opening of a document
- Characterize the internal and external dependencies of a document
- Formalize and instrumentalize the average opening set of document sets
- Characterize the degree of openness of large repositories by complete scanning or sampling

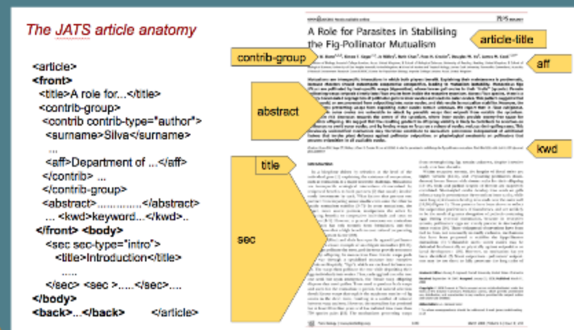
For the present proposal the scope of the discussion had as object the repositories and articles of scientific knowledge only, and not in the legislative one.

Methodology

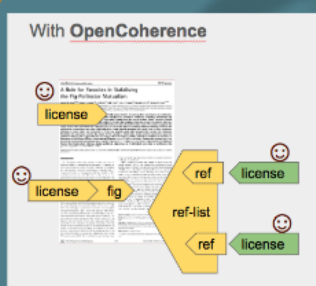
a was chosen
mes for Fiocruz
survey of the
out around this
s implemented
questions arose
f researches in

d effect of the
ific knowledge,
metrics for this
ign is therefore
thematic JATS
ividual articles

JATS
Journal Article Tag Suite

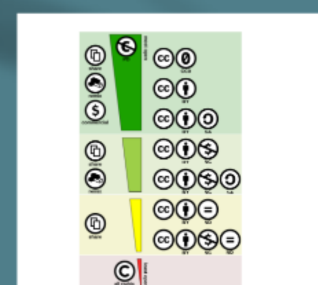


JATS
Journal Article Tag Suite



Article Openness

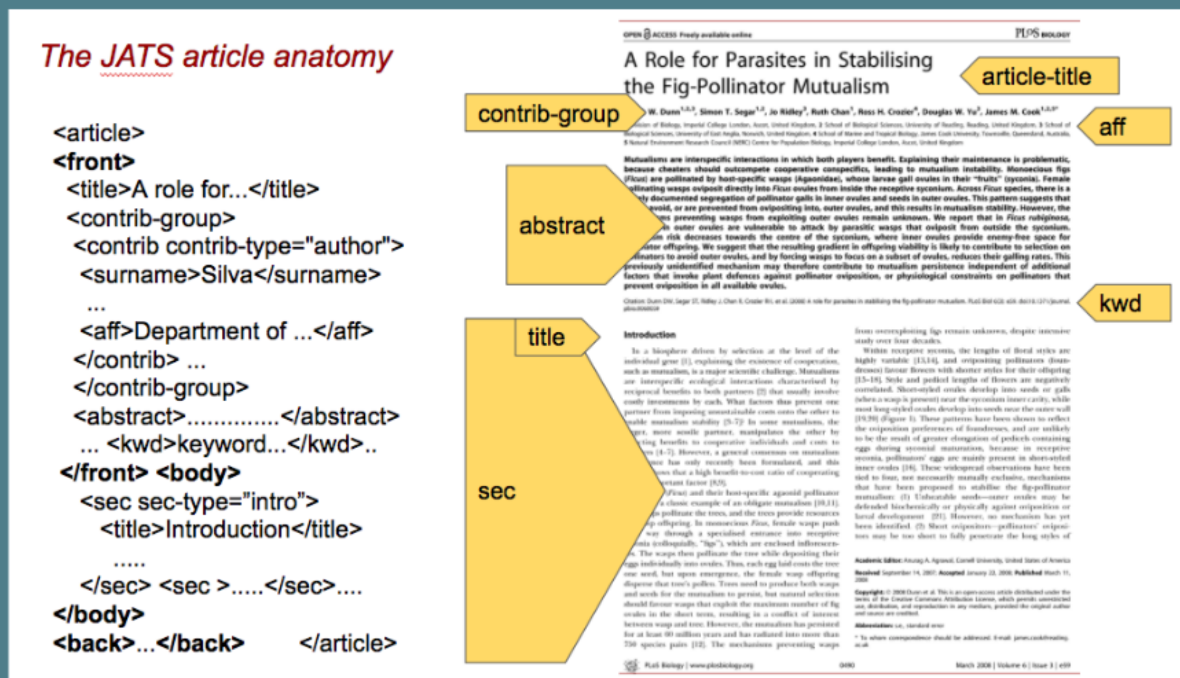
Our 2015's first arbitrary **scores** by ranking.



The 2016's Creative Commons's **license spectrum**.

JATS

Journal Article Tag Suite

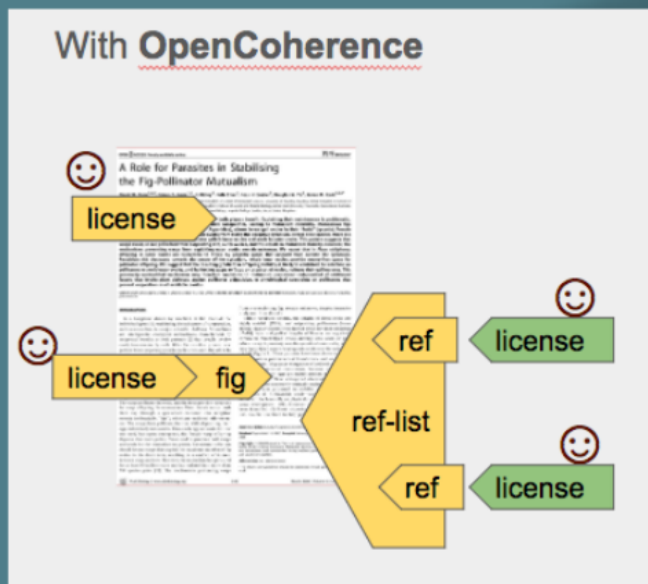


The JATS article anatomy

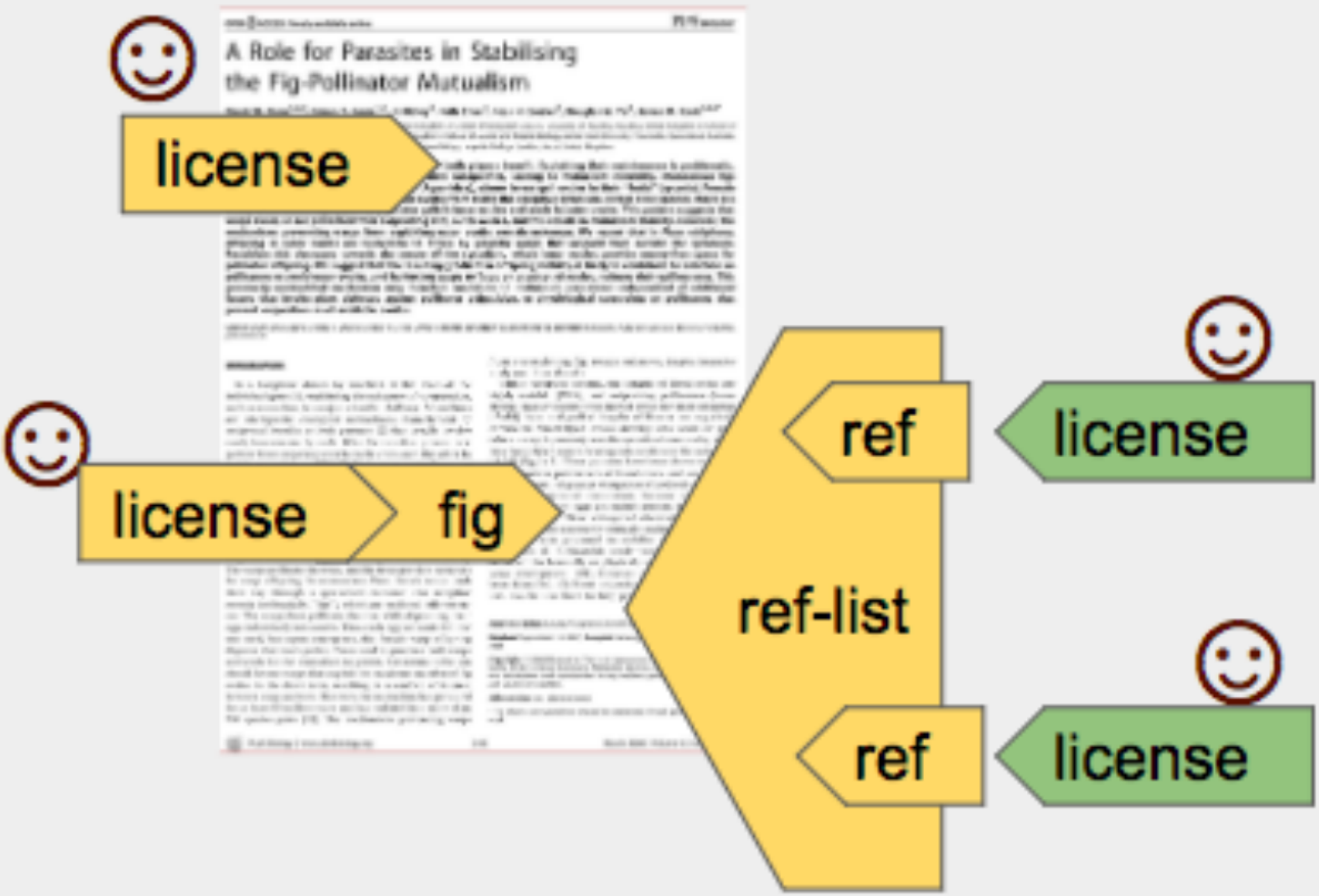
```
<article>
<front>
  <title>A role for...</title>
  <contrib-group>
   <contrib contrib-type="author">
    <surname>Silva</surname>
     ...
    <aff>Department of ...</aff>
   </contrib> ...
   </contrib-group>
   <abstract>.............</abstract>
    ... <kwd>keyword...</kwd>..
 </front> <body>
    <sec sec-type="intro">
      <title>Introduction</title>
        .....
    </sec> <sec >.....</sec>....
</body>
<back>...</back>        </article>
```

JATS

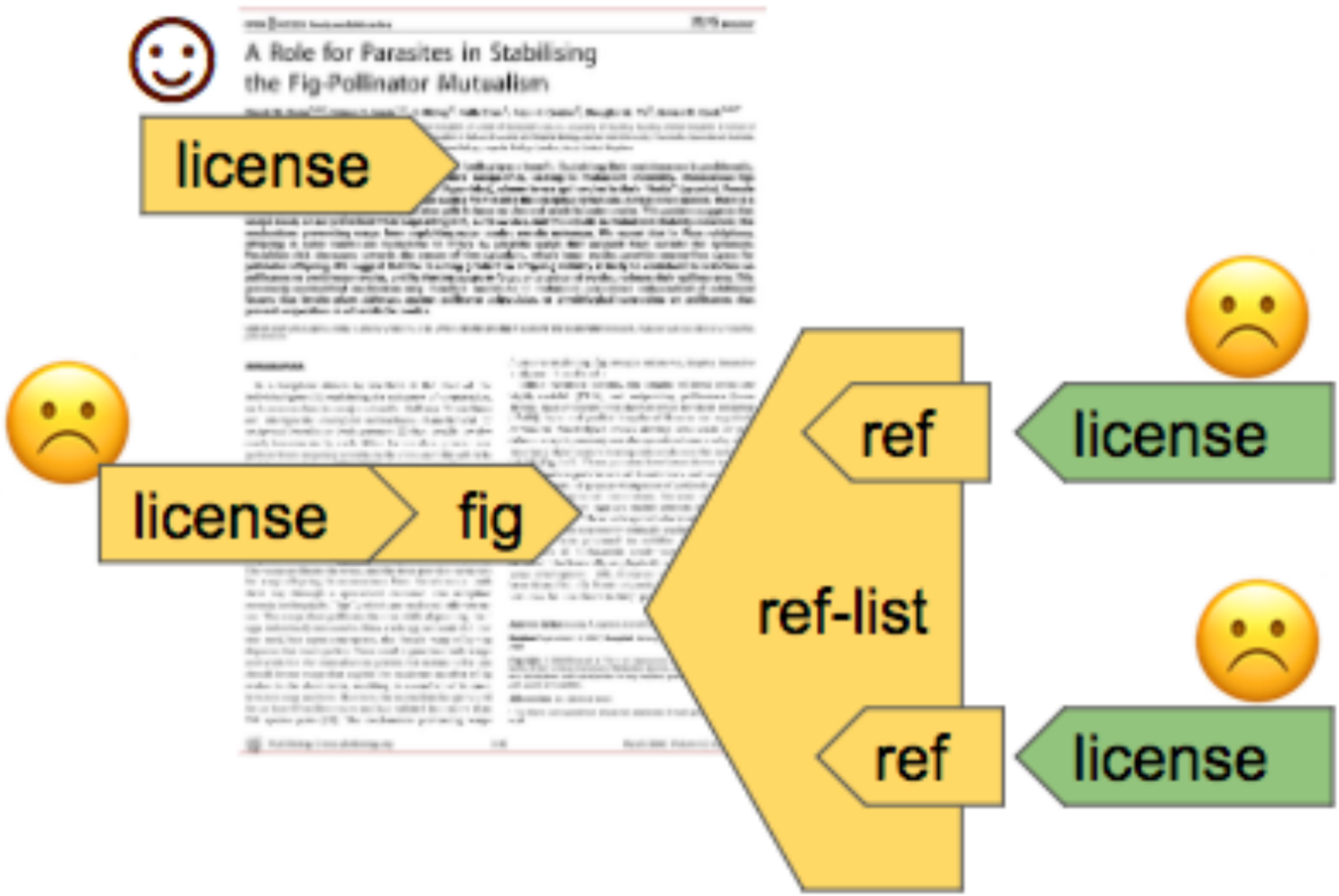
Journal Article Tag Suite



With OpenCoherence

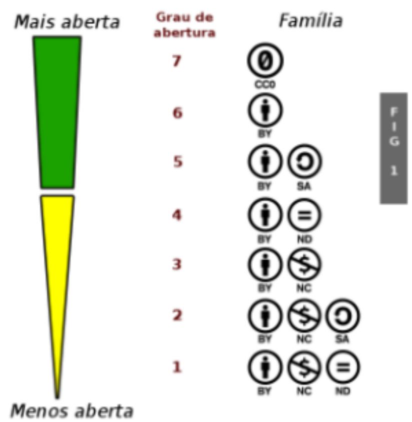


With **less coherence**

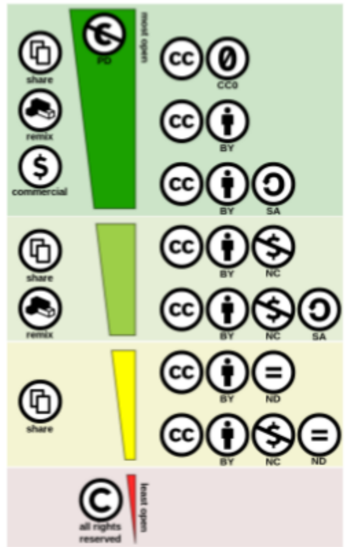


Article Openness

License family ranking

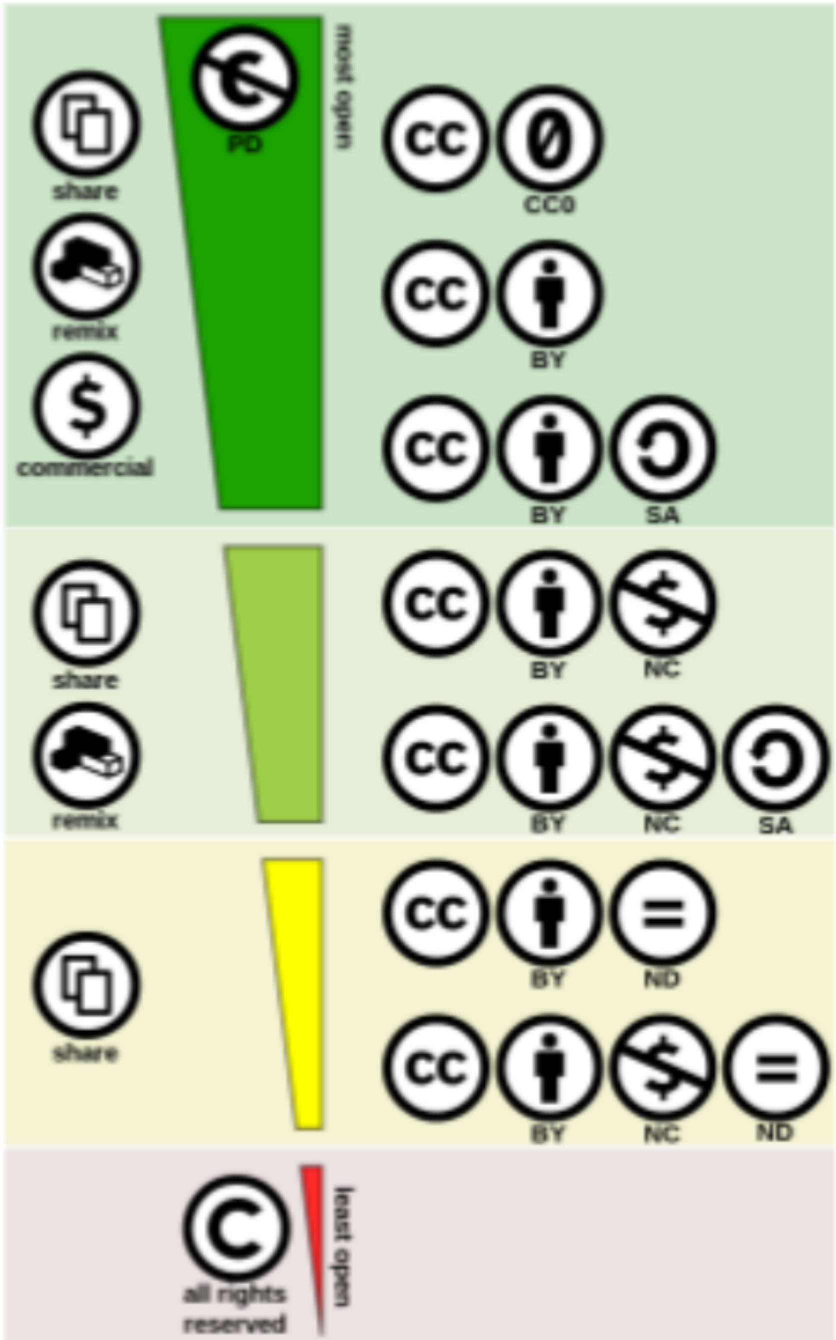


Our 2015's first arbitrary **scores** by ranking.



The 2016's Creative Commons's **license spectrum**.

https://creativecommons.org/



The 2016's Creative Commons's **license spectrum**.

https://creativecommons.org/

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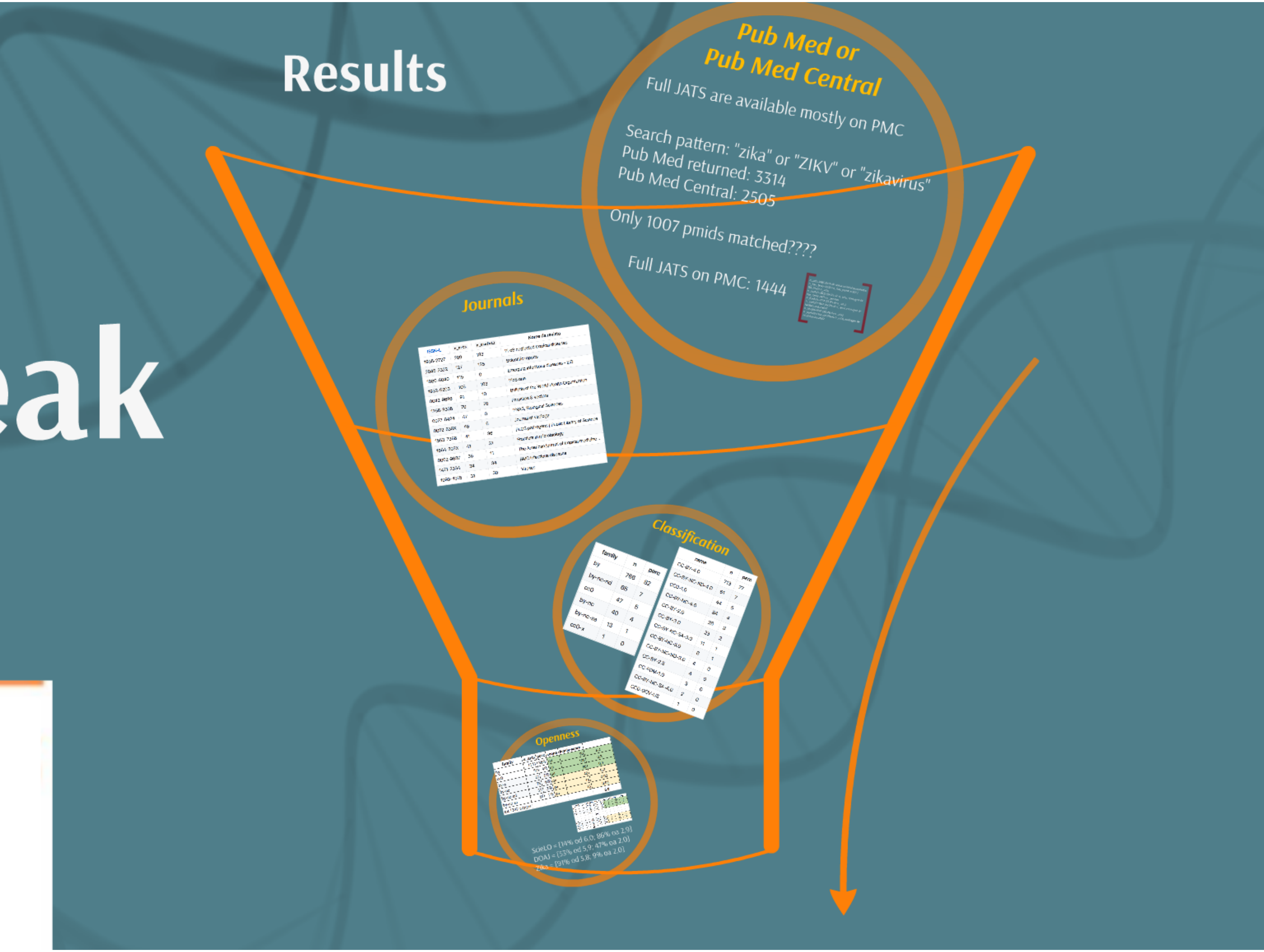
NoDerivatives NoDerivatives (nd)

You let others copy, distribute, display and perform only original copies of your work. If they want to modify your work, they must get your permission first.



family	n	perc
by	768	82
by-nc-nd	66	7
cc0	47	5
by-nc	40	4
by-nc-sa	13	1
cc0-x	1	0

name	n	perc
CC-BY-4.0	713	77
CC-BY-NC-ND-4.0	61	7
CC0-1.0	44	5
CC-BY-NC-4.0	34	4
CC-BY-2.0	26	3
CC-BY-3.0	23	2
CC-BY-NC-SA-3.0	11	1
CC-BY-NC-3.0	8	1
CC-BY-NC-ND-3.0	4	0
CC-BY-2.5	4	0
CC-PDM-1.0	3	0
CC-BY-NC-SA-4.0	2	0
CC0-GOV-US	1	0

Pub Med or
Pub Med Central

Full JATS are available mostly on PMC

Search pattern: "zika" or "ZIKV" or "zikavirus"
Pub Med returned: 3314
Pub Med Central: 2505

Only 1007 pmids matched????

Full JATS on PMC: 1444

n_arts=2405 (96% do universo inicial pesquisado)
n_has_body=2032 e n_has_permiss=2032 (84,5% de n_arts)
n_useful1=2032 (84,5% de n_arts), contagem de has_body and has_permiss
n_hasRefs=1778 (73,9% de n_arts)
n_useful2=1667 (69,3% de n_arts), contagem de hasRefs and useful1
n_isValid=1940 (80,7% de n_arts)
n_useful3=1444 (60,0% de n_arts), contagem de isValid and useful2

rnals

Nome da revista

n_arts=2405 (96% do universo inicial pesquisado)
n_has_body=2032 e n_has_permiss=2032
(84,5% de n_arts)
n_useful1=2032 (84,5% de n_arts), contagem de
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Journals

ISSN-L	n_arts	n_useful3	Nome da revista
1935-2727	209	183	PLoS neglected tropical diseases
2045-2322	127	125	Scientific reports
1080-6040	115	0	Emerging infectious diseases - EID
1932-6203	106	103	PloS one
0042-9686	91	10	Bulletin of the World Health Organization
1756-3305	70	70	Parasites & vectors
0027-8424	47	0	PNAS, Biological Sciences
0022-538X	46	6	Journal of virology
1553-7366	41	36	PLOS pathogens / Public Library of Science
1664-302X	41	37	Frontiers in microbiology
0002-9637	36	11	The American journal of tropical medicine...
1471-2334	34	34	BMC infectious diseases
1999-4915	31	30	Viruses

Full JA

ISSN-L	n_arts	n_useful3	Nome da revista
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Classification

family	n	perc
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CC-BY-NC-4.0	34	4
CC-BY-2.0	26	3
CC-BY-3.0	23	2
CC-BY-NC-SA-3.0	11	1
CC-BY-NC-3.0	6	1
CC-BY-NC-ND-3.0	4	0
CC-BY-2.5	4	0
CC-PDM-1.0	3	0
CC-BY-NC-SA-4.0	2	0
CC0-GOV-US	1	0

Openness

family	n_arts	perc	scope	family-score	
by	1151	86%	od	90	5,4
cc0	50	4%	od	100	0,3
by-x	12	1%	od	85	0,1
by-nc	78	6%	oa	40	0,2
by-nc-nd	35	3%	oa	14	0,03
by-nc-sa	16	1%	oa	15	0,01
tot 1342 artigos					**6,0**

family	n_arts	perc_tot	perc	scope	family-score	score
by	1151	86%	95%	od	90	6,0
cc0	50	4%	4%	od	100	0,3
by-x	12	1%	1%	od	85	0,1
	1213					
		91%				
by-nc	78	6%	60%	oa	40	6,0
by-nc-nd	35	3%	27%	oa	14	0,3
by-nc-sa	16	1%	12%	oa	15	0,1
	129					

SciELO = [14% od 6,0; 86% oa 2,9]

DOAJ = [53% od 5,9; 47% oa 2,0]

Zika = [91% od 5,8; 9% oa 2,0]

family	n_arts	perc_tot	perc	scope	family-score	score
by	1151	86%	95%	od	90	6,0
cc0	50	4%	4%	od	100	0,3
by-x	12	1%	1%	od	85	0,1
	1213					
		91%				
by-nc	78	6%	60%	oa	40	6,0
by-nc-nd	35	3%	27%	oa	14	0,3
by-nc-sa	16	1%	12%	oa	15	0,1
	129					

Thank You!

Ricardo Sampaio
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Ministério da Saúde
FIOCRUZ
Fundação Oswaldo Cruz

UnB

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