

February 2022

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Agenda

- 1. Understanding Web of Science
- 2. Effective Use of Web of Science
 - Locate high impact articles and journals
 - Analyze results to identify research trends and opportunities
- 3. Q&A

What is Web of Science (WOS)?

A citation database that covers:

- >26,000 high impact journals (95% of top journals; also include OA journals)
- >8 millions conference papers
- 250 disciplines including Science, Social Science, Art and Humanities, with coverage dating back to 1900

Limitations of WOS

- Primarily <u>English</u> language journals are covered
- Some subject areas are not relatively well-covered including business and education, compared to STM
- Better coverage in journals and conference proceedings than books, book chapters, dissertations, etc

Web of Science (WOS) @ HKUST

<u>Core Collections</u> HKUST Subscription

- Science Citation Index Expanded (SCI-Expanded), 1975-
- Social Science Citation Index (SSCI)
- Conference Proceedings Citation Index – Science (CPCI-S), 1975-
- Conference Proceedings Citation Index – Social Science & Humanities (CPCI-SSH), 1990-
- Book Citation Index
- Emerging Sources Citation Index

Related Database

Incites Journal Citation Report

HKUST Subscription

All Collections

- Core Collections +
- Biological Abstracts
- BIOSIS Citation Index
- BIOSIS Previews
- CAB Abstracts
- Chinese Science Citation Database
- Current Contents Connect
- Derwent Innovations Index
- FSTA Food Science & Technology Abstracts
- INSPEC
- Medline
- Zoological Record

The Concept of Citation



Who Will Use Web of Science (WOS)?



Administration

- University ranking
- Performance Appraisal



Librarian

- Journal subscription

- Author/Publication Profile (HKUST Scholarly Publication Database

(http://repository.ust.hk/ir/sp)



Researcher

- Literature search for a research topic
- Identify research development trend
- Finding funding agencies
- Identify potential collaboration
- Author profile
- Apply for fellowship / promotion, etc

Researcher Workflow

Suppose you are writing a paper on Ebola, and you have to do some literature search. How can you find "<u>relevant</u>" and "<u>good</u>" articles?

Researcher Workflow

- 1. Literature Search
- 2. Writing Your Paper and Manage References
- 3. Target at the Right Journal for Paper Submission
- 4. Promotion

Recommended Tools WOS or Scopus *

Managing References RefWorks / Endnote / Mendeley

Incites Journal Citation Report / SCImago Journal & Country Rank

Researcher ID, Google Scholar ID, ORCID, HKUST Scholarly Publication Database (SPD) – http://repository.ust.hk/ir/sp

* Scopus is also a citation database

Literature Search Flow (1)



Literature Search Flow (2)



High Impact Articles

WOS Demo (Library Homepage > Databases > W > Web of Science)

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Author Identifiers (ORCID Group Editor, etc)) Hong Kong Uni	versity of Science and Technology

WOS – Basic Search (topic: Ebola)

- Refine: Web of Science Categories, Document Types, etc...
- Sort by: Times Cited, Usage Count, etc...

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🔲 盲 Review Articles	1,456	Sep 2018 JOURNAL OF IMMUNOLOGICAL METHODS 460, pp.10-16	10
Early Access	96	Ebolaviruses are highly virulent pathogens that cause Ebola viral disease (EVD). Data from non-human primate (NHP) models and from human survivors of EVD suggest that anti-Ebola antibodies play an integral role in protection. Antibody-dependent cell-mediated cytotoxicity (ADCC) is a potential mechanism	References
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2020	1,370	Ebola virus was first identified as a filovirus in 1976, following epidemics of severe haemorrhagic fever in sub-Saharan Africa. Further outbreaks have	12 References
2019	1,079	occurred since, but, despite extensive and continued investigations, the natural reservoir for the virus remains unknown. The mortality rate is high and	Neichenees
2018	1,076	there is no cure for Ebola virus infection. Molecular technology is proving useful in extending our knowledge of the virus. Identific Show more	
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WOS Basic Search

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2020	1,370	Ebola virus was first identified as a filovirus in 1976, following epidemics of severe haemorrhagic fever in sub-Saharan Africa. Further outbreaks have occurred since but despite extensive and continued investigations, the natural reservoir for the virus remains unknown. The mortality rate is high and	References
2019	1,079	there is no case for Ebola virus infection. Molecular technology is proving useful in extending our knowledge of the virus. Identific Show more	
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WOS – Basic Search

Citation Network View Journal Impact

A novel Ebola virus antibody-dependent cell-mediated cytotoxicity (Ebola ADCC) assay

By: Singh, K (Singh, Karnail)^{1,2}; Marasini, B (Marasini, Bishal)²; Chen, XM (Chen, Xuemin)³; Spearman, P (Spearman, Paul)^{1,2} JOURNAL OF IMMUNOLOGICAL METHODS

Volume: 460 Page: 10-16 DOI: 10.1016/j.jim.2018.06.002 Published: SEP 2018 Indexed: 2018-08-31 Document Type: Article

Abstract

Ebolaviruses are highly virulent pathogens that cause Ebola viral disease (EVD). Data from non-human primate (NHP) models and from human survivors of EVD suggest that anti-Ebola antibodies play an integral role in protection. Antibody-dependent cell-mediated cytotoxicity (ADCC) is a potential mechanism through which anti-Ebola antibodies may mediate protection. We developed a robust Ebola-specific ADCC assay for use in ongoing trials of Ebola vaccines. Stable cell lines for inducible Zaire ebolavirus glycoprotein (EBOV GP) expression were developed to provide a uniform source of target cells in the assay, and were combined with an existing human natural killer (NK) cell line as the effector cell. When applied to commercially available anti-EBOV GP monoclonal antibodies, the assay clearly differentiated antibody with high ADCC activity from those with low or no ADCC activity. Anti-EBOV ADCC activity was also detected in plasma samples from rhesus macaques immunized with a candidate Ebola vaccine. The Ebola ADCC assay reported here will be a useful tool in studying the functionality of anti-EBOV GP antibodies elicited by Ebola vaccines in ongoing and future clinical trials.

Keywords

Author Keywords: Ebola viral disease; Zaire; Ebolavirus; ADCC; Ebola glycoprotein Keywords Plus: PROTECTS NONHUMAN-PRIMATES; VACCINE; INFECTION

Author Information

Corresponding Address: Spearman, Paul (corresponding author)

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- ² Cincinnati Childrens Hosp Med Ctr, Div Infect Dis, Dept Pediat, 3333 Burnet Ave, ML 7017, Cincinnati, OH 45229 USA
- ³ Emory Univ. Sch Med. Dept Pediat. Div Infect Dis. Atlanta. GA USA

Journal information

JOURNAL OF IMMUNOLOGICAL METHODS

ISSN: 0022-1759 elSSN: 1872-7905 Current Publisher: ELSEVIER, RADARWEG 29, 1043 NX AMSTERDAM, NETHERLANDS Journal Impact Factor: Journal Citation Report TM Research Areas: Biochemistry & Molecular Biology; Immunology Web of Science Categories: Biochemical Research Methods; Immunology

Citation Network In Web of Science Core Collection Citations Create citation alert 5 10 Times Cited in All Cited References Databases View Related Record + See more times cited

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Kasereka, MC; Ericson, AD; Hawkes, MT; et al. Prior vaccination with recombinant Vesicular Stomatitis Virus - Zaire Ebolavirus vaccine is associated with improved survival among patients with Ebolavirus infection VACCINE

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WOS – Analyze Results

- Who is the most productive researcher in this area?
- Which organization/university has the most number of publications?
- Which funding agency provides the most (\$) support?

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- Export to RefWorks (bibliographic management tool) in RIS format
- Set up Alerts

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2020	1,370		Ebola virus was first identified as	s a filovirus in 1976, following epidemics of se	vere haemorrhagic fever in sub-Saharan Africa. Further outbreaks have	References
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Promoting Your Work

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Zhao, T.S. Return to S ResearcherID: A 1341- Other Names: Tim Zha URL: http://ww Subject: Energy Keywords: heat & m ORCID: https://o	earch Rogo Get A Badge Researcher/D Labs 2009 My Institutions (more details) o; Tanshou Zhao; T.S. Zhao; 赵天寿 Primary Institution: The Hong Kong Univers ww.researcherid.com/rid/A-1341-2009 Sub-org/Dept: & Fuels; Engineering; Mechanics; Thermodynamics Role: Faculty nass transfer, fuel cells rid org/0000-003-4825-2381		T.S. Zhao 赵天寿 Chair Professor of Mechanical & Aerospace Engineering, HKUS Heat transfer, Energy engineering, Fuel cells Verified email at ust.hk - Homepage	⊠ Fo	vilow -	Citation indice	e Schol Get my own profile s All	ar Q Since 2009
Description: T.S. Zhao transport v Electrochii is a Fellow	is Chair Professor of Mechanical Engineering and Director of the Center for Sustainable Energy Technology at HKUST. H with electrochemical reactions, and computational modeling. He has received a number of recognitions, including the Mos mica Acta, the Overseas Distinguished Young Scholars Award from NSFC, the Croucher Senior Fellowship award from t or ASME. In the international community, he serves as Editor of the RSC Energy & Environment Series, Regional Editor	Title Lattice Boltzmann Z Guo, TS Zhao Physical Review E 66 (model for incompressible flows through porous media 3), 036304	Cited by 270	Year 2002	Citations h-index i10-index	15167 58 325	10666 50 252
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	Title: A Paper-Based Microfluidic Fuel Cell with Hydrogen Peroxide as Fuel and Oxidant Author(s): Yan, Xiaohui; Xu, Ao; Zeng, Lin; et al Source: Energy Technology Volume: 6 Issue: 1 Pages: 140-143 Published: 2018 Times Cited: 4 DOI: 10.1002/ente.201700470				1	added 9-Mar-18		

ResearcherID: <u>http://www.researcherid.com/rid/A-1341-2009</u> ORCID: <u>https://orcid.org/0000-0003-4825-2381</u>

Researchers' Impact

Measure researcher's research impact (e.g. H-index)

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Terminology

Cited References – the documents cited by the "Article A", aka "End of Paper References"

Time Cited – the number of times the "Article A" was cited by other articles

Bibliometrics – a set of quantitative methods to measure the impact of academic literature. Well-known metrics include h-index, impact factor and citation counts.

Related Records(Articles) – records (articles) that share cited references with "Article A". These "records" may link up know ideas to discover unknown concepts

Review articles – to summarize the current state of understanding of a topic that has studied previously. Usually will not present any new information on a subject

References

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How to Win Prizes?

1. E-Discovery Week Web of Science - Quiz



2. <u>E-Discovery Week Challenge</u> February 14-18