

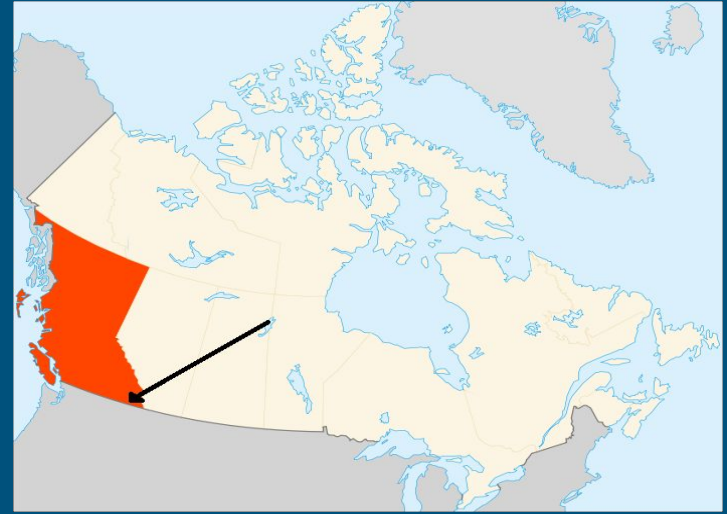
WikiProject Medicine A Year in Review 2017

James Heilman
MD, CCFP(EM), Wikipedian



A little about myself

- Small town ER doc
- Some academic affiliation but a long way from my University (~800 Km)
- Became involved in 2008 after coming across a poor quality medical article
- An active volunteer ever since



What we have done in 16/17

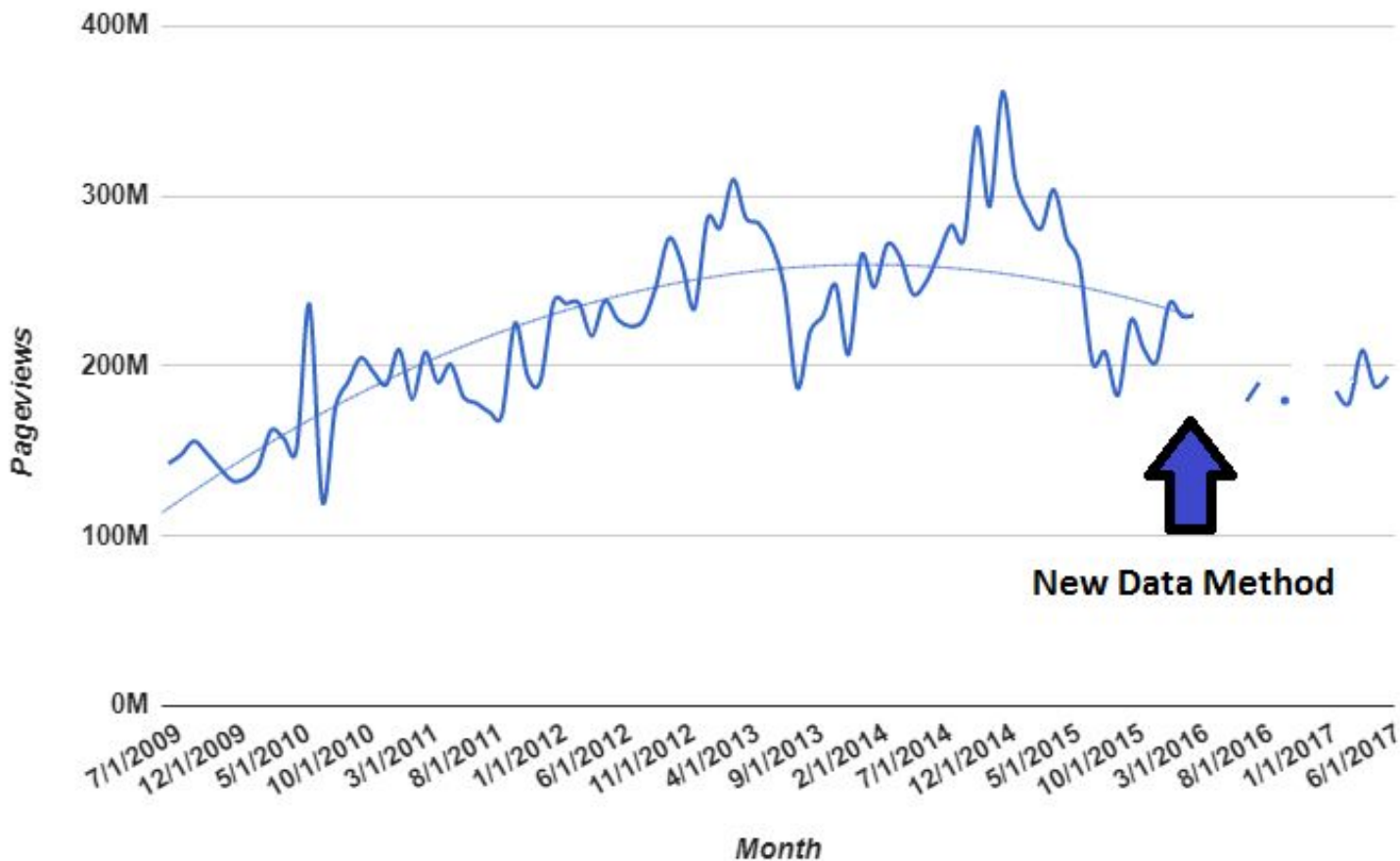


- Stats
- Infobox update
- Translation efforts
- Medical apps
- Internet-in-a-Box
- UCSF
- Videos
- Research
- WHO
- Licensing
- Other collaborations
- WPMF

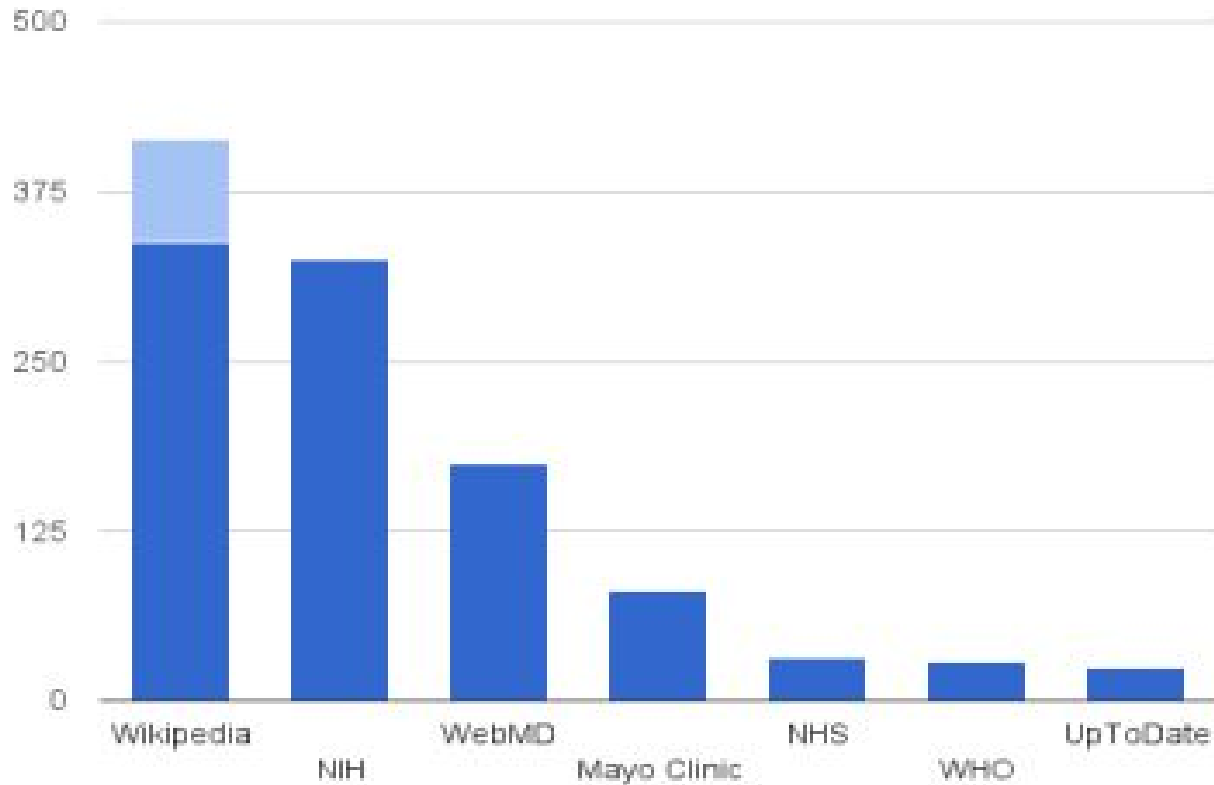
Stats

- Article numbers: **155,805** across **255** languages (2013) -> **197,909** across **279** languages (2017) [27% increase]
- Pageviews: ~**6.5 B** (2013) -> ? (2017)
- >**60%** of readership from mobile
- Editors: **274** (2013) -> **270** (2015) [2% decrease]
- **3rd** most active WP after MilHis and WomRed (**2nd** most watched)

Estimates Medical Pageviews (Accounting for Mobile)



Page views (millions), July 2014

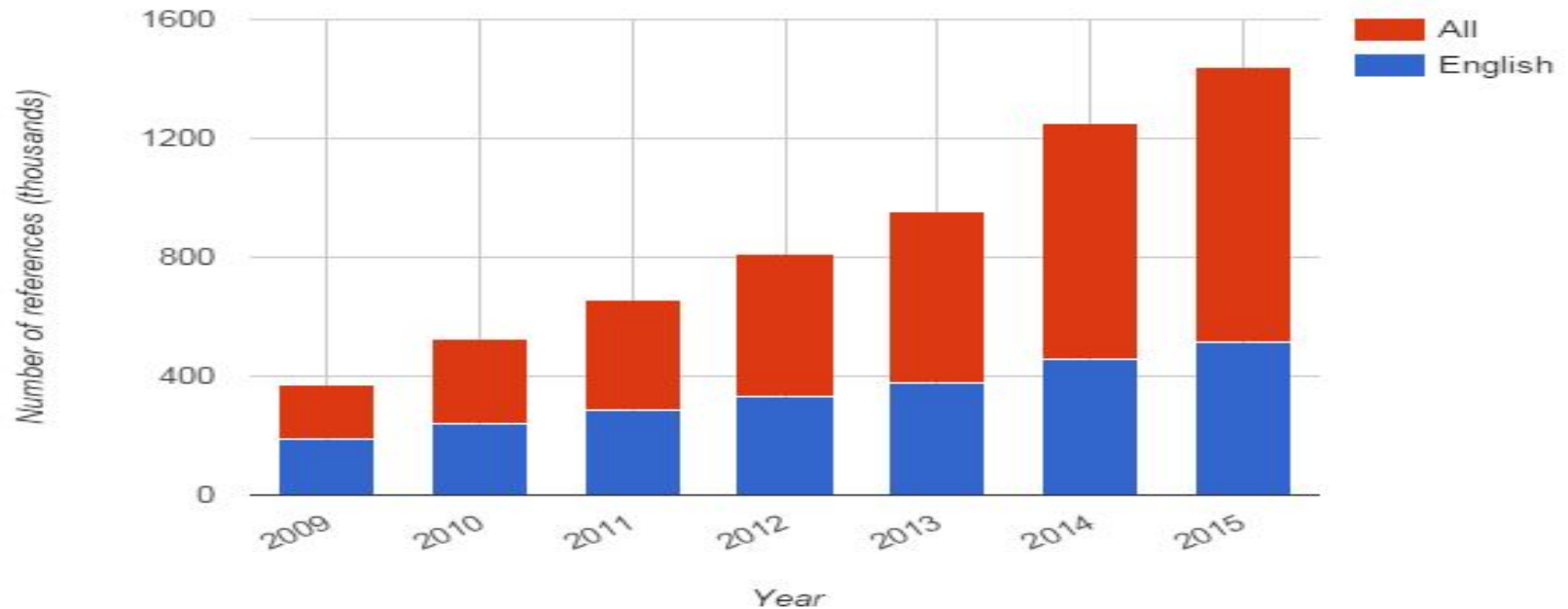


J Med Internet Res. 2015 Mar 4;17(3):e62. doi: 10.2196/jmir.4069.

Wikipedia and medicine: quantifying readership, editors, and the significance of natural language.


Heilman JM¹, West AG.

Reference numbers



Infobox update

Schizophrenia



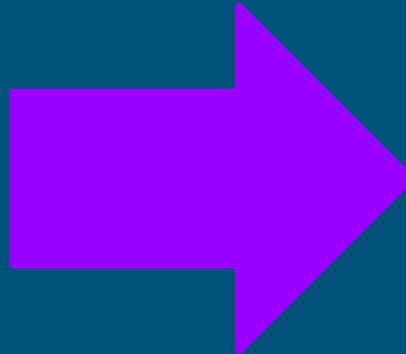
Self-portrait of a person with schizophrenia, representing that individual's perception of the distorted experience of reality in the disorder

Pronunciation / *skɪtʃəˈfrɪniə*, *skɪdʒ*-, -*ou*-, -*freniə*^[1]


Classification and external resources

Specialty	Psychiatry
ICD-10	F20 ↗
ICD-9-CM	295 ↗
OMIM	181500 ↗
DiseasesDB	11890 ↗
MedlinePlus	000928 ↗
eMedicine	med/2072 ↗ emerg/520 ↗
Patient UK	Schizophrenia ↗
MeSH	F03.700.750 ↗

[\[edit on Wikidata\]](#)



Schizophrenia



Self-portrait of a person with schizophrenia, representing that individual's perception of the distorted experience of reality in the disorder

Pronunciation / *skɪtʃəˈfrɪniə*, *skɪdʒ*-, -*ou*-, -*freniə*^[1]

Specialty Psychiatry

Symptoms False beliefs, confused thinking, hearing voices others do not^{[2][3]}

Usual onset Typically early adulthood^[3]

Duration Chronic^[3]

Causes Environmental and genetic factors^[4]

Risk factors Cannabis use, problems during pregnancy, being raised in a city, older father^[4]

Diagnostic method Based on observed behavior, reported experiences, and reports of others familiar with the person^[5]

Similar conditions Substance abuse, Huntington's disease, mood disorders, autism^[6]

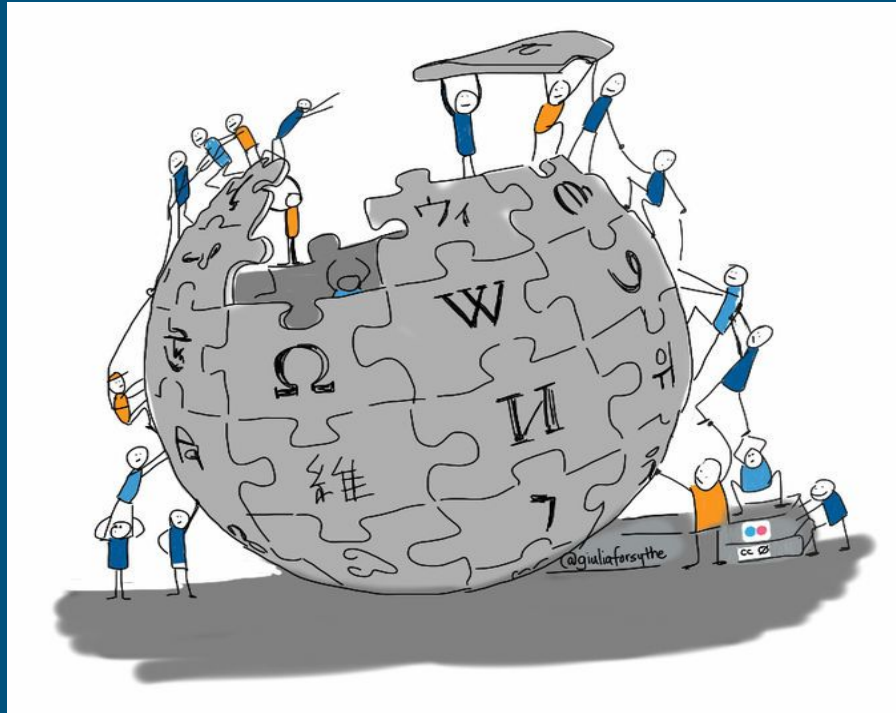
Treatment Counselling, job training^{[4][2]}

Medication Antipsychotics^[4]

Prognosis 18–20 years shorter life expectancy^{[7][8]} due to increases in suicide, heart and lifestyle disease^[8]

Frequency ~0.5%^[9]

Collaborations



Medical Translation Project



Two article tracks



- Short

- 3 to 4 paragraphs
- Leads of English articles ~750 words
- Goal: 1,000 (871)

- Full

- Brought to GA/FA
- 2,500-10,000 words
- Goal: 100 (33)



- Translation

- 100+ languages
- >5 million words
- Value ~\$1 million



Example article

Rabies

From Wikipedia, the free encyclopedia

"Rabid" redirects here. For the 1977 film, see [Rabid \(film\)](#). For the punk rock band, see [Rabid \(band\)](#). For other uses, see [Rabies \(disambiguation\)](#).

Rabies is a viral disease that causes inflammation of the brain in humans and other mammals.^[1] Early symptoms can include fever and tingling at the site of exposure.^[1] These symptoms are followed by one or more of the following symptoms: violent movements, uncontrolled excitement, fear of water, an inability to move parts of the body, confusion, and loss of consciousness.^[1] Once symptoms appear, the result is nearly always death.^[1] The time period between contracting the disease and the start of symptoms is usually one to three months; however, this time period can vary from less than one week to more than one year.^[1] The time is dependent on the distance the virus must travel to reach the [central nervous system](#).^[4]

Rabies is caused by *lyssaviruses*, including the [rabies virus](#) and [Australian bat lyssavirus](#).^[2] Rabies is spread when an infected animal scratches or bites another animal or human.^[1] Saliva from an infected animal can also transmit rabies if the saliva comes into contact with the eyes, mouth, or nose.^[1] Globally, dogs are the most common animal involved.^[1] More than 99% of rabies cases in countries where [dogs](#) commonly have the disease are caused by [dog bites](#).^[5] In the [Americas](#), [bat bites](#) are the most common source of rabies infections in humans, and less than 5% of cases are from dogs.^{[1][5]} Rodents are very rarely infected with rabies.^[5] The [rabies virus](#) travels to the brain by following the [peripheral nerves](#). The disease can only be diagnosed after the start of symptoms.^[1]

Animal control and vaccination programs have decreased the risk of rabies from dogs in a number of regions of the world.^[1] Immunizing people before they are exposed is recommended for those who are at high risk. The high-risk group includes people who work with bats or who spend prolonged periods in areas of the world where rabies is common.^[1] In people who have been exposed to rabies, the [rabies vaccine](#) and sometimes [rabies immunoglobulin](#) are effective in preventing the disease if the person receives the treatment before the start of rabies symptoms.^[1] Washing bites and scratches for 15 minutes with soap and water, [povidone iodine](#), or detergent may reduce the number of viral particles and may be somewhat effective at preventing transmission.^{[1][6]} Only five people have survived a rabies infection after showing symptoms, and this was with extensive treatment known as the [Milwaukee protocol](#).^{[7][8]}

Rabies caused about 17,400 deaths worldwide in 2015.^[3] More than 95% of human deaths caused by rabies occur in [Africa](#) and [Asia](#).^[1] About 40% of deaths occur in children under the age of 15.^[9] Rabies is present in more than 150 countries and on all



A dog with rabies in the paralytic (post-furious) stage

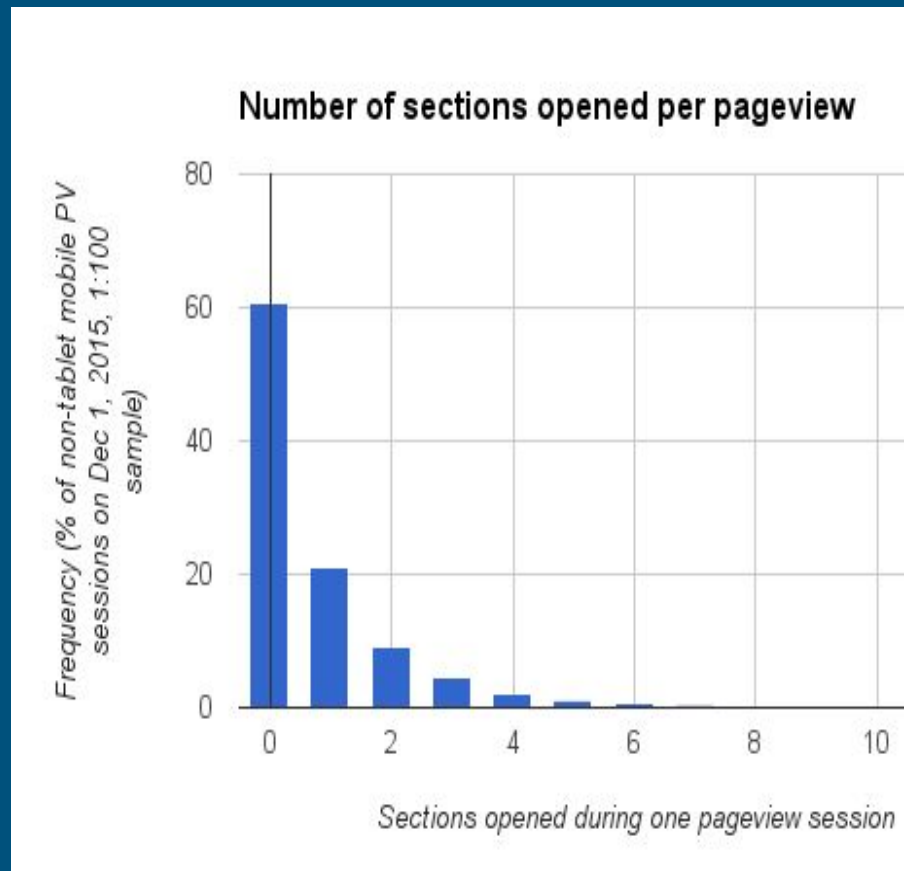
Specialty Infectious disease

Symptoms Fever, fear of water, confusion^[1]

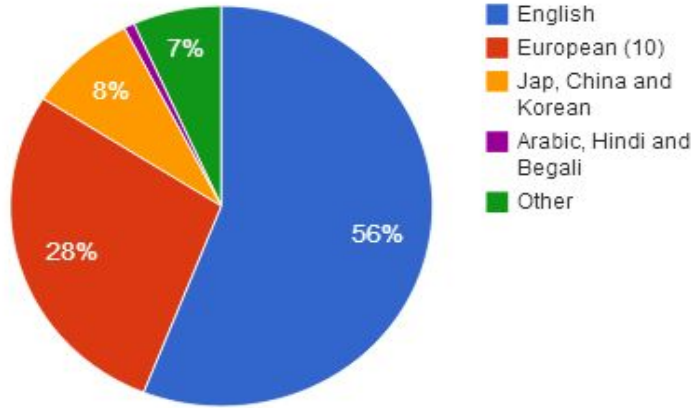
Causes Rabies virus and Australian bat lyssavirus^[2]

Translation efforts

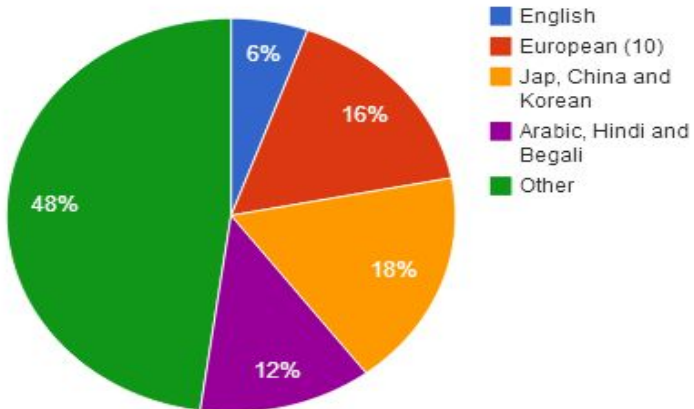
- Working on the leads
- Topic specific campaigns
- Video captions ~800 translated



Internet by Language

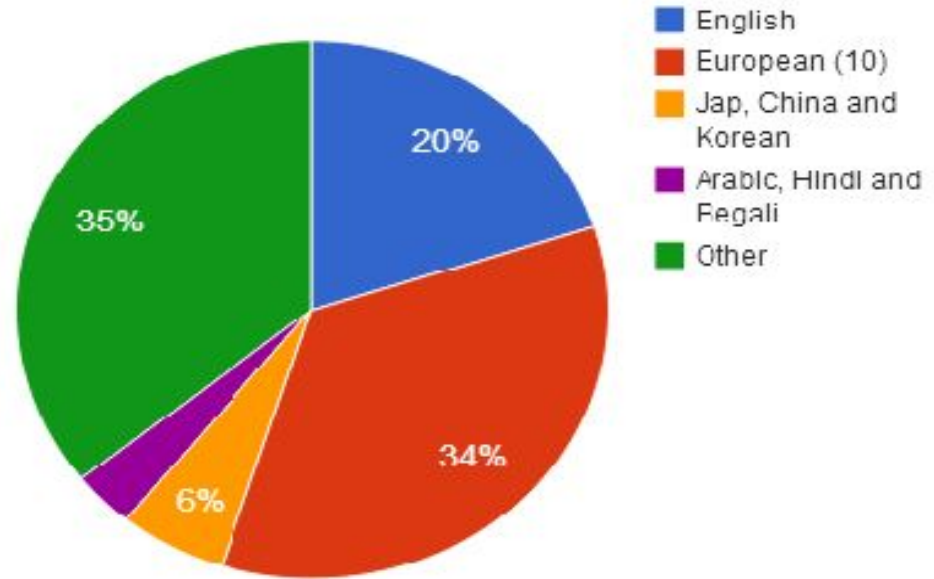


World By Language



Why is this Needed?

Wikipedia by Language



European: German, French, Italian, Spanish, Dutch, Polish, Russian, Portuguese, Swedish

Ebola

- 2014 Outbreak in Liberia, Sierra Leone, Guinea and Nigeria
- The most used internet site in Liberia, Sierra Leone and Guinea for Ebola
- Greater than CNN, CDC and World Health Organization
- Content available in 115 languages
- ~100M pageviews in 2014



Wikimedia Taiwan



- Started fall 2014
- National Taiwan University College of Medicine
- Using a combination of Facebook and Hackpad
- Translated >250 short articles into Chinese in a short period of time

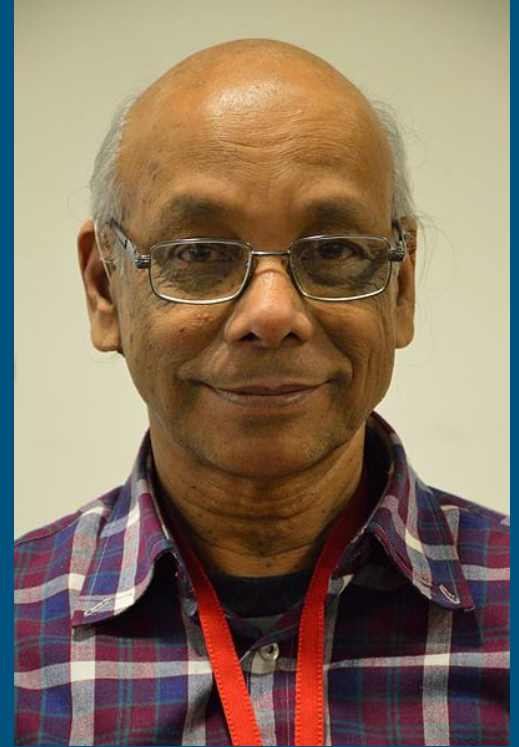
Feedback from a student

“Participating in this project **changed my perspective on knowledge**. In finding a balance between using precise professional terms and common words to explain a medical condition, I learned a lot. It has **helped me to have better communication with my patients**”

Aaron Huang

Language Champions

- Oriya (33 million native speakers)
- Small community of 25 editors (5 plus edits)
- Subas Chandra Rout
- >700 articles translated

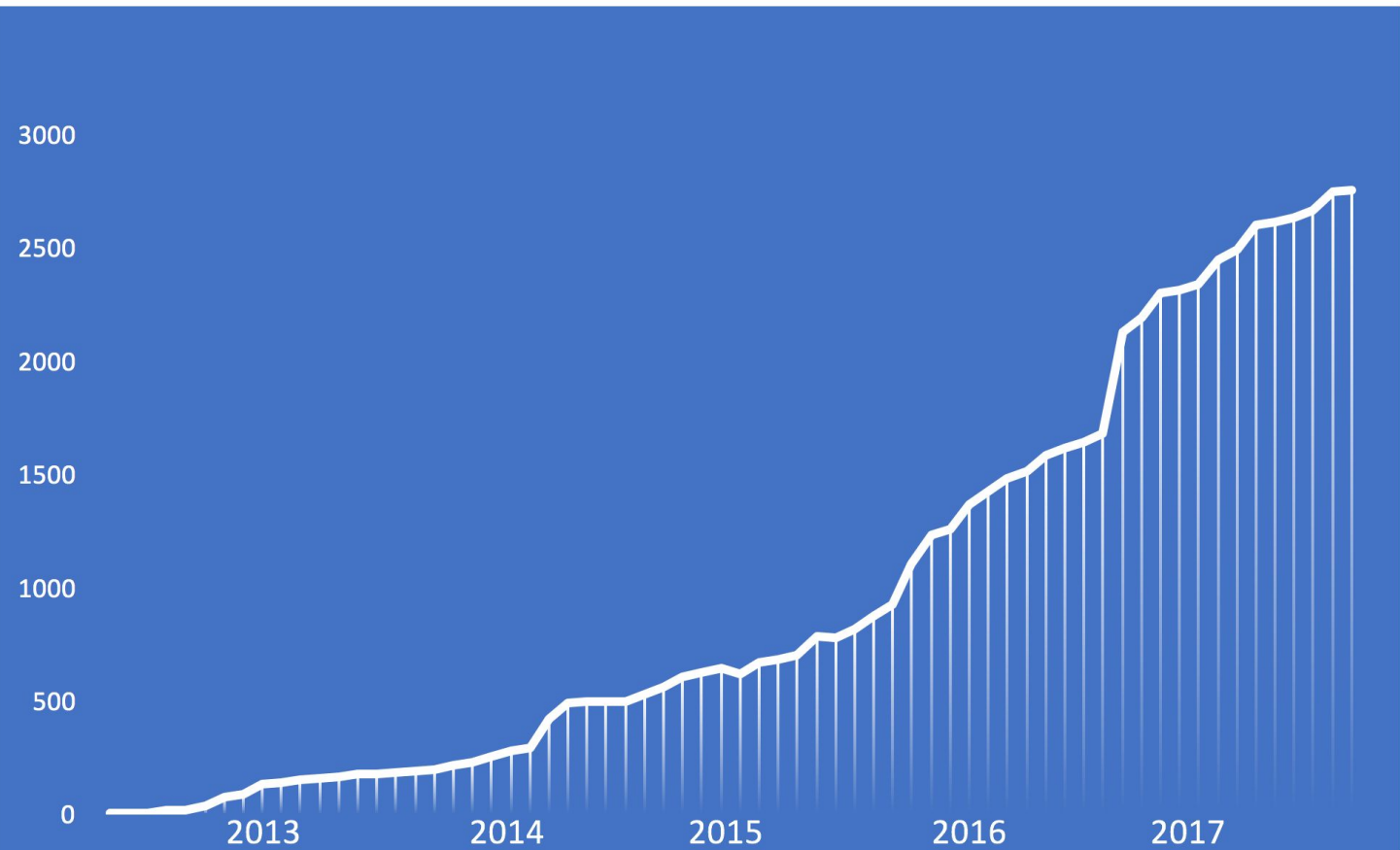


By Biswarup Ganguly
CC BY SA

Employee

- Lucas Rosnau
 - Translation coordinator
 - 392 hrs (2015) -> 221 hrs (2016)
 - Has returned to teaching
- Looking for replacement and funding





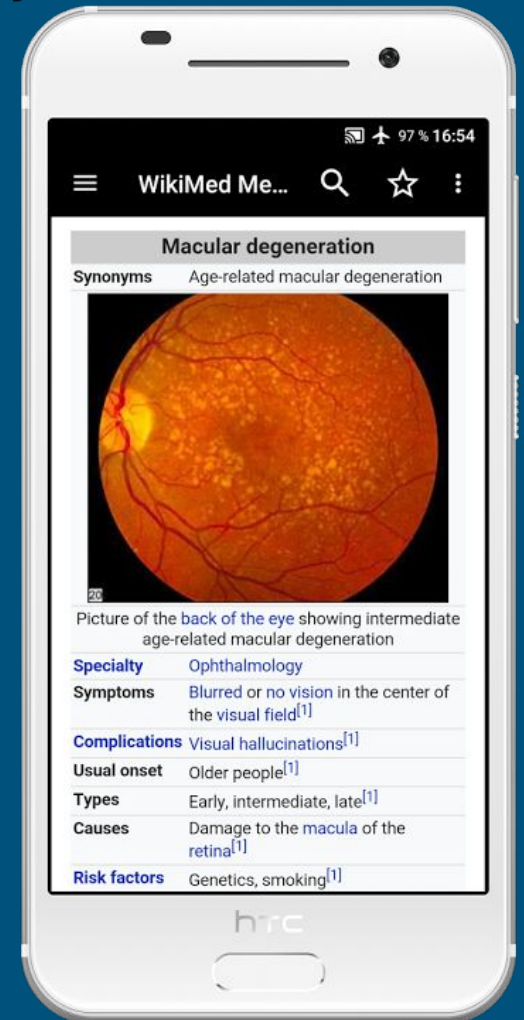
Project coordinators

Carl

Lucas

Digital Last Mile

- 3.5B people on the Internet
- 4.0B people **Not** on the Internet
- Solutions
 - Wikipedia Zero
 - Offline apps (for those with intermittent access)
 - Internet in a Box (for those with no access)





We have an offline version of our medical content. **Download the Android app** and access this content when there is no Internet.



- Built in collaboration with WMCH/Kiwix
- Includes diseases, anatomy, sanitation, physiology, dentistry, and medication content
- 1.2 Gb (4.2 Gb with videos)



The App

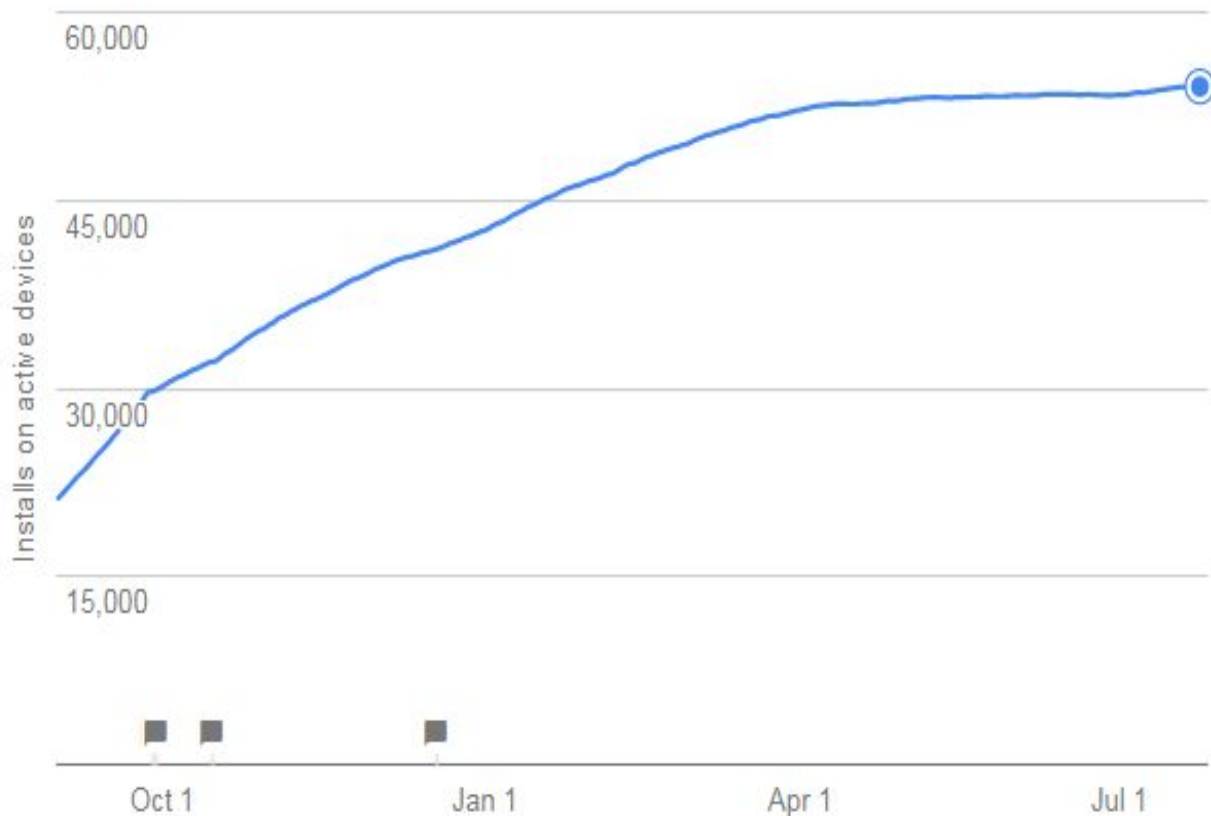


Wikipedia's health care articles can be viewed offline with the **Medical Wikipedia app**.

- Overall rating of 4.7
- >200 k of downloads for android
- 10 language versions
- ZIMs in other languages but no apps yet
- “Brilliant. Wikimedia, by providing these very useful contents for free and in such a simple and easy to use app, you are serving humanity.”

Installs on active devices

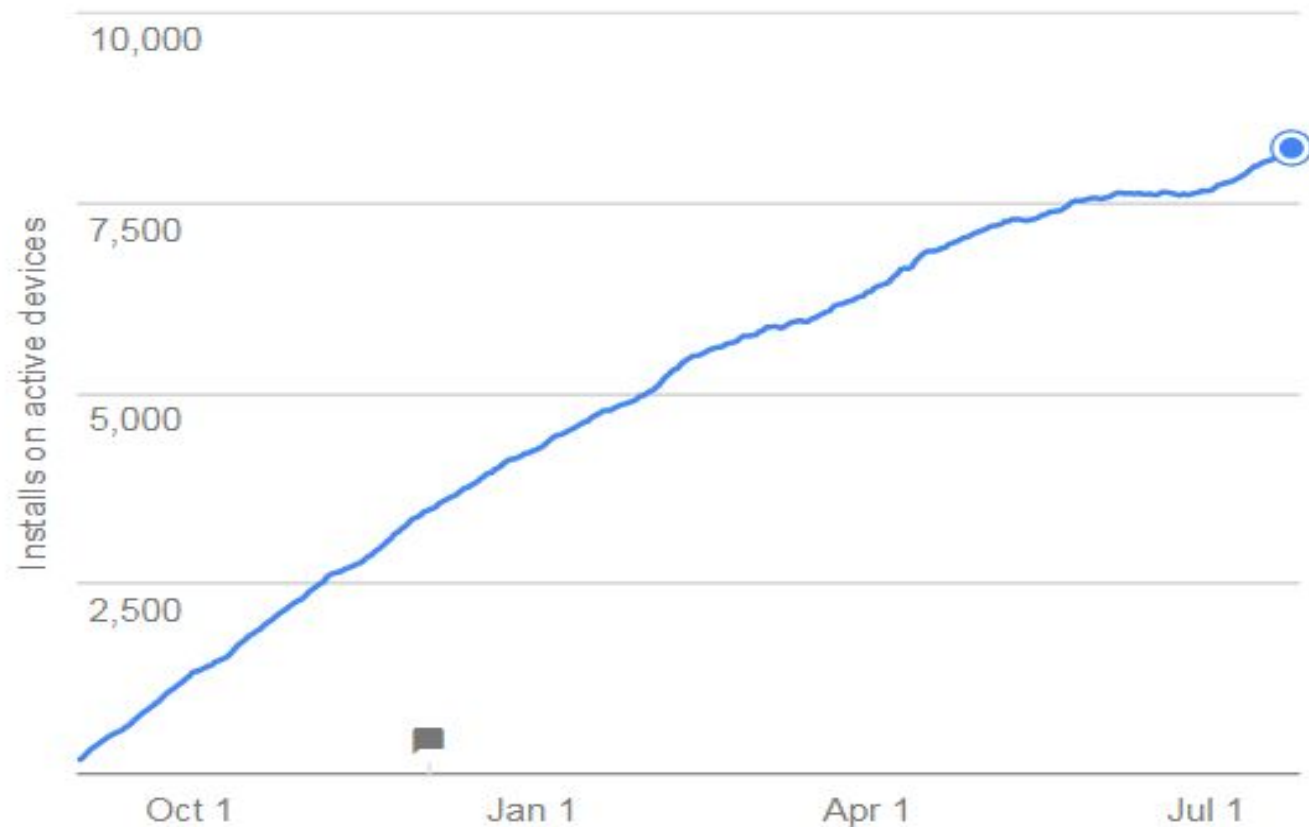
Display date comparison



EN

Installs on active devices

•• Display date comparison



AR

Reach (Current active installs on Android)

- ENWP
 - 43% US
 - 10% UK
 - 7% India
 - 5% Canada
- WP
 - 75% Global North

<input checked="" type="checkbox"/>	All countries	53,453	100.0%
<input type="checkbox"/>	India	16,019	30.0%
<input type="checkbox"/>	Pakistan	5,323	10.0%
<input type="checkbox"/>	Philippines	4,713	8.8%
<input type="checkbox"/>	United States	4,046	7.6%
<input type="checkbox"/>	Nepal	3,348	6.3%
<input type="checkbox"/>	Bangladesh	1,650	3.1%
<input type="checkbox"/>	Iraq	1,187	2.2%



Internet-In-A-Box

- Provides Wikipedia offline
- Allows ~ 30 people to connect
- Being installed / trialled in a number of locations
- Allows viewing and downloading of the medical apps
- Includes other resources
- Cost \$350 -> \$25



Research: Better than UpToDate for Medical Students

- Students given a quiz (30 min)
- Access to one: UpToDate, textbook, Wikipedia (30 min)
- Retested (30 min)
- Those who used WP had greater increase in scores
- WP had better search and interlinking
- Another paper found Residents rank WP highly and as one of their most visited sites

Future research

Q: How much does the packaging of content affect people's assessment of its reliability?

Methods: Take a WP article and make it appear like the BMJ and vice versa. Give pairs of these articles randomly to academics to review using the DISCERN score

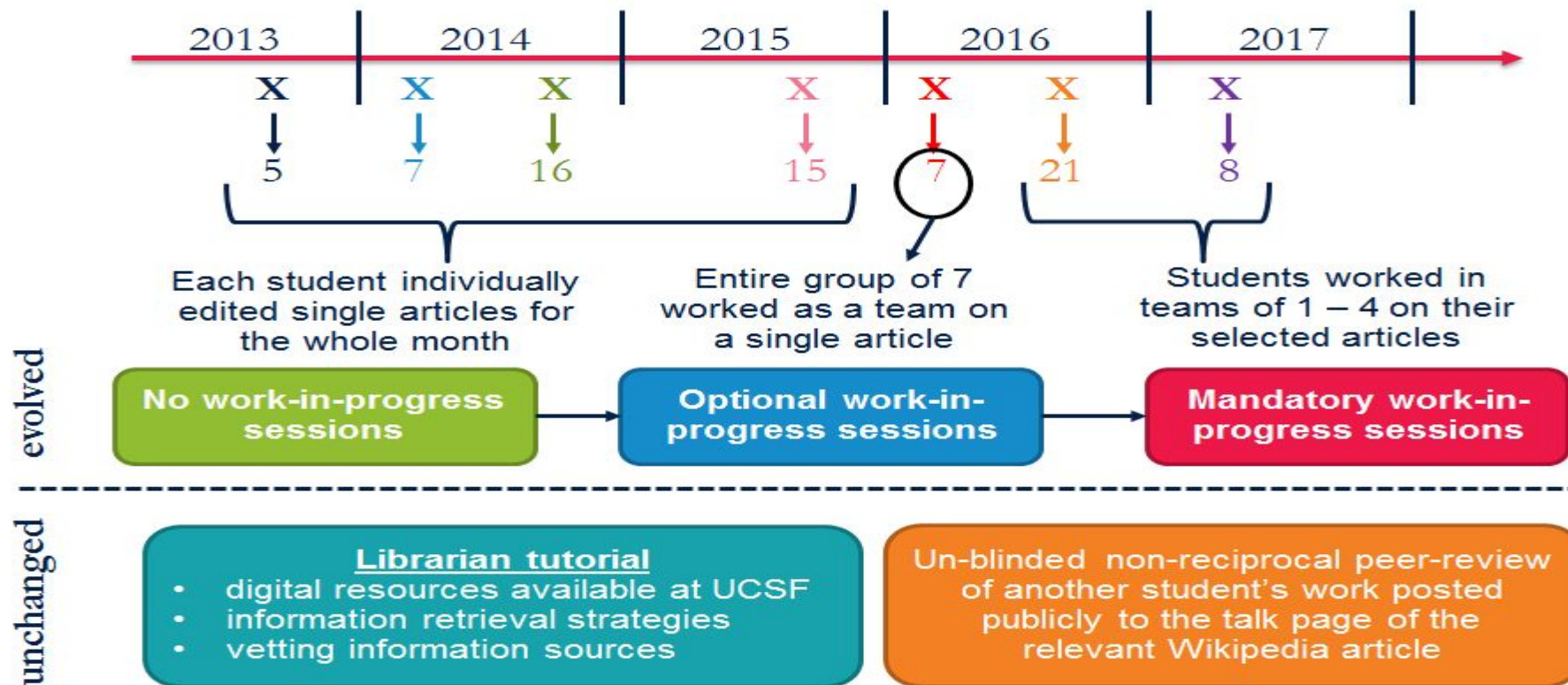


UCSF



- 8th groups of students since we started in 2013 (80 total)
- Co-supported with Wiki Ed Foundation
- Pharmacy students as well
- Other schools also involved include Sackler (Israel), Rush

Methods



Interest from the wider community

- Paper published in the journal Academic Medicine "Why medical schools should embrace Wikipedia: Analysis of final-year medical student contributions to Wikipedia articles for academic credit at one school" under a CC BY SA 4.0 license
- Dr. Amin Azzam (Hewitt Foundation 20% time) to engage medical schools with Wikipedia
- Developing a 2 year elective by Shani Even for medical students (starting September 2017)

Osmosis



- Started in late 2015
- More than 240 short animated videos (5-10 minutes) on key diseases
- 5.5 million video views
- Released under a CC BY SA license
- Subtitles being translated into other languages

Cochrane

- Excellent continued commitment
- Have hired a part time WP editor
- Increase in editors adding Cochrane reviews
- Tool tagging reviews in need of updating working well



Licensing



- International League Against Epilepsy (ILAE) -> switched the licensing of their encyclopedia to CC BY SA
- World Health Organization -> WHO Bulletin now CC BY SA and released the EML as well

NIH/CDC



National Institutes of Health
Turning Discovery Into Health

- The NIOSH/CDC has hired two part time WiR
 - James Hare
 - John Sadowski
- We had a week of talks at the NIH this last Nov.
- NIH has provided “peer review” to SCA lead
- NCI people are working on Wikipedia content

Wikiversity Journal of Medicine



- Started in 2014
- Open access medical journal hosted on WV
- 21 articles published following formal peer review * 2
- “Second Journal of Science” launched
- User Group recognized
- Pubmed indexing and a new sister project?

Awards to top editors

Thank you for being one of Wikipedia's top medical contributors!

please help translate this message into your local language via meta [↗](#)



The 2016 Cure Award

In 2016 you were one of the top ~200 medical editors across any language of Wikipedia. Thank you from Wiki Project Med Foundation for helping bring free, complete, accurate, up-to-date health information to the public. We really appreciate you and the vital work you do! Wiki Project Med Foundation is a [user group](#) whose mission is to improve our health content. Consider joining [here](#), there are no associated costs.

Thanks again :-)) -- [Doc James](#) along with the rest of the team at [Wiki Project Med Foundation](#) 18:07, 3 May 2017 (UTC)



A Chance for Questions

