Biofeedback



Special Libraries Association Biomedical and Life Sciences Division

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Chair's Message



Neyda Gilman

Hello DBIOers!

I'm realizing at some point we should come up with a new way to identify ourselves since we are now a community rather than a division. Maybe just the BLS community (pronounced bliss)? That isn't important right now as we have plenty of time as SLA continues to adapt and adjust. What is important is that we are group of Individuals who work, learn, and grow together. I will forever be grateful to the people in this group (community, division, Whatever). It is all of you who make SLA worth being a part of. During this time of increased isolation I am even more appreciative of this group and hope that you find some sense of community in it as well. We had our first Zoom chat a couple of weeks ago and it was uplifting to see people, or just hear their voices, and hear how people have been coping with their own isolation and other

Chair's Message (continued)

struggles. A lot of us are taking advantage of being able to spend more time outside whether for walks or in our own backyards and gardens. Others expressed gratitude at having extra time in their day due to not having a commute. These are just a couple of the small positives in what seems to be a pool of negatives and we are grateful for them.

How are you doing? What struggles and hardships has this pandemic led to for you, and what positives have come out of it? Hopefully there is at least a little of the latter. We hope to have another DBIO wide Zoom call, and hope you can join us. In the meantime please let us know if there is something DBIO can do to assist you. Are there webinars or workshops you would like to see us put out sooner rather than later? Are there resources the group can help find? Is there another way besides Zoom and Connect that you would like to use to communicate? As we are all aware, this is an unprecedented time but we're all in it together.

Stay safe, and sane, and happy!

Past Chair's Message



Peggy Murphy

Biofeedback Survey

As you may have heard, *Biofeedback's* esteemed editor-in-chief, Buzz Haughton, recently "retired" from his volunteer position. That got us thinking that this is a good time to evaluate your opinions about *Biofeedback* so that we can make it as useful as possible to the DBIO membership. We encourage you to complete the survey by May 30, 2020. It should take you no longer than 10 minutes to complete. As an incentive, one lucky winner will receive a \$25 Amazon e-card from a random drawing. Take the survey at https://www.surveymonkey.com/r/H9SLP5F.

Change in Leadership

Ruth Gustafson will be filling in as secretary for DBIO starting June 1, 2020 and going through the rest of the year. We want to thank both Ruth, for stepping up, and Kristin Chapman for her service as secretary.

Member News

Mallory N. Blasingame and Jing Su, MD, of the Center for Knowledge Management at Vanderbilt University Medical Center, co-authored a Case Report on the background and context of their publishing decision support tool SPI-Hub™. Mallory has also described additional development details for us (see below).

Koonce, Taneya Y, Mallory N. Blasingame, Jerry Zhao, Annette M. Williams, Jing Su, MD, Spencer J. DesAufels, Dario A. Giuse, John D. Clark, Zachary E. Fox, and Nunzia Bettinsoli Giuse. 2020. "SPI-Hub™: A Gateway to Scholarly Publishing Information." Journal of the Medical Library Association April 108(2):286-294 doi: dx.doi.org/10.5195/jmla.2020.815

The Center for Knowledge Management (CKM) team at Vanderbilt University Medical Center, which includes SLA DBIO members Mallory Blasingame and Jing Su, recently released its Scholarly Publishing Information Hub (SPI-Hub™), a publicly available scholarly publishing interactive portal. Current SPI-Hub™ features include the ability to search journals by name, topic of interest/research, or author (e.g., using an ORCID ID) and view publishing practices and quality criteria for each retrieved journal.

SPI-Hub™ was developed through knowledge management of the CKM information scientists' knowledge of the publishing industry and the mechanics of selecting journals in which to publish. The team's collective knowledge was embedded and retained in the tool through processes such as the creation of the Knowledge Management Journal Record™, which incorporates 25 metadata fields that provide a comprehensive insight into a journal's publication practices and transparency, and development of algorithms that drive intelligent ranking of journal topic search results and indicate to authors when a journal may require more careful review. For more information, visit SPI-Hub™ at https://spi-hub.app.vumc.org/.

Ramune K. Kubilius, of Galter Health Sciences Library & Learning Center, Northwestern University Feinberg School of Medicine, served as one of the curators for the MLA Collection Development Best Practices document, version 1.0, 2019. It can be viewed at https://www.mlanet.org/d/do/16857. It is aimed at health science librarians, especially librarians new to collection development.

Feature article on Epidemics/Pandemics and DBIO's Top 100 Journals in Biology and Medicine by Tony Stankus

In This Age of SARS, MERS, & COVID-19 Epidemics Do the DBIO 100 Journals Still Matter?

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Do the 100 original research, non-review-format, biomedical and life sciences journals voted by our membership as most influential over the last century in the 2008-2009 DBIO 100 poll still have relevance in this age of coronavirus epidemics? (See "The Top 100 Journals in Biology and Medicine" https://dbiosla.org/publications/resources/dbio100.html) 66 of the DBIO 100 are journals that would obviously not apply ----- the Annals of the Entomological Society of America, the Canadian Journal of Forest Research, the Journal of Shellfish Research, Limnology and Oceanography, and Systematic Botany, being obvious examples. But what about the remaining 34? We tested their mettle using data from the Web of Science Core Collection. For each of the major successive coronavirus epidemics ---SARS, MERS, and COVID-19 ----we identified the journals publishing the 125 articles most "used." In Web of Science terms an article is "used" when an individual searcher clicks on an entry for that article to access the abstract and/or full text.

We also identified the 100 most often cited SARS, MERS, and COVID-19 articles, and further determined which journals had published the most of them, and how many citations were accumulated by each journal.

These parameters of 125 articles "used" and 100 most cited papers were set by our desire for comparability with the limited number (125) of different COVID-19 articles recorded as having been clicked on for content and the limited number of citations (101) to COVID-19 papers available by the end of March 2020. In the case of SARS and MERS the numbers of uses and citations were, of course, higher, because these diseases have been around longer. In our counting system, if one of the 125 most used articles came from *Science*, and had been clicked on 151 times, we would score 151 uses for *Science* for that paper. If yet another paper from *Science* made the top 125, and had been clicked on 38 times, the cumulative usage count for *Science* would then rise to 189, and so on. We paid particular attention to which if any of these more heavily used" or frequently cited journals were included in the DBIO 100.

SARS

Severe Acute Respiratory Syndrome or SARS initially broke out in China in the early 2000s, having its origin in coronaviruses which flourished in cave bats and palm civets. It spread to over 20 countries --- with a particularly notable outbreak in Toronto---with about 8,000 cases and 800 fatalities worldwide.

The 125 most "used" SARS articles were clicked on 19,793 times. They appeared in 66 different journals.

Sources of most often "used" SARS papers *indicates DBIO 100 journals

1	*Nature	2181
2	*Lancet	1979
3	Journal of Medical Virology	1732
4	*Science	1678
5	*New England Journal of Medicine	1176
6	Nature Medicine	709
7	Nature Reviews Microbiology	647
8	Infections Genetics and Evolution	488
9	*Proceedings of the National Acade- my of Sciences	476
10	International Journal of Food Microbiolo- gy	390

DBIO 100 journals were extremely important, accounting for 38% (7,432) of the total. Nature came in $1^{\rm st}$ with 2,181 uses; Lancet $2^{\rm nd}$ (1,979); Science and the New England Journal of Medicine tied for $4^{\rm th}$ (1,678 each); the Proceedings of the National Academy of Sciences $9^{\rm th}$ (476). Farther down the list BMJ, Cell, and the Journal of Virology collectively racked up 418 clicks.

Non-DBIO journals that did particularly well in the top ten included the *Journal of Medical Virology* 3^{rd} (1,368); two *Nature* offshoots, *Nature Medicine* 6^{th} (709), and *Nature Reviews Microbiology* 7^{th} (647). Two journals managed by Elsevier on behalf of societies related to their titles rounded out the top 10: *Infections, Genetics, and Evolution* 8^{th} (488), and the *International Journal of Food Microbiology* 10^{th} (390 uses).

The 100 most-cited SARS articles accumulated 47,791 hits spread over 40 journals. Once again DBIO 100 Journals had an outstanding performance, accounting for 71% of citations, 33,825.

Sources of most cited SARS papersindicates DBIO 100 journals

1	*New England Journal of Medicine	8508
2	*Science	7807
3	*Nature	591
4	*Lancet	4120
5	*Proceedings of the National Academy of Sciences	3803
6	*Journal of Virology	1663
7	Nature Medicine	1598
8	*Cell	1089
9	BMC Infectious Diseases	976
10	PLOS Medicine	885

They swept the top six spots: 1st the *New England Journal of Medicine* (8,508); 2nd *Science* (7,807); 3rd *Nature* (5,912); 4th *Lancet* (4,120); 5th *Proceedings of the National Academy of Sciences* (3,803); 6th *Journal of Virology* (1663). *Cell* is 8th (1089). Farther down the list were *JAMA* (500) and *Clinical Infectious Diseases* (423).

Non-DBIO 100 journals filling out the top ten included DBIO 100 offshoot 7th place *Nature Medicine* (159) and two Open Access journals, 9th place *BMC Infectious Diseases* (976) and 10th *PLOS Medicine* (885).

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MERS

Middle East Respiratory Syndrome (MERS) broke out in the mid-2010s on the Arabian peninsula, but travelers brought it to other parts of the world, including South Korea. Like SARS, it was thought to have originated with coronaviruses that thrived in bats, but there is some thought that camels might have served as intermediary vectors. There were approximately 2,500 diagnosed cases with about 850 fatalities.

Sources of most often "used" MERS papers *indicates DBIO 100 journals

1	Nature Reviews Microbiology	634
2	Lancet Infectious Diseases	597
3	*Lancet	407
4	*Nature	400
5	*New England Journal of Medicine	363
6	Antiviral Research	345
7	*Journal of Virology	309
8	mBIO	283
9	Acta Pharmaceutica	250
10	Nature Medicine	237

There were 8,583 uses noted among the top 125 articles spread out over 70 journals. DBIO 100 journals accounted for 2,321 papers overall (22%) and four of the top 10 journals. Lancet was 3rd (407 clicks); Nature 4th (400); the New England Journal of Medicine 5th (363); the Journal of Virology 7th (309). Farther down the list, most notably, the Proceedings of the National Academy of Sciences, Science, Cell, the Journal of Virology, Critical Care Medicine, and Clinical Infectious Diseases collectively accounted for 456 uses.

Non-DBIO 100 journals that placed highly included four offshoots of DBIO journals: *Nature Reviews Microbiology* was 1st (634 clicks); *Lancet Infectious Diseases* 2nd (597); *mBIO* 8th (283) is an Open Access entry from the publishers of the *Journal of Virology* and other American Society for Microbiology titles; *Nature Medicine* 10th (237). *Antiviral Research* from Elsevier is 6th (345). *Acta Pharmaceutica* 9th (250) is from the Croatian Pharmaceutical Society, and is here owing to a remarkable chemical synthesis of promising antiviral compounds reported in a now-classic paper.

Sources of the most cited MERS articles *indicates a DBIO 100 journal

1	*New England Journal of Medicine	1323
2	Lancet Infectious Diseases	1241
3	*Lancet	640
4	Emerging Infectious Diseases	630
5	*Nature	535
6	mBIO	411
7	Eurosurveillance	399
8	*Journal of Virology	338
9	*Proceedings of the National Academy of Sciences	181
10	Cell Research	177

The 100 most cited MERS articles yielded 7,336 items spread over 100 journals. DBIO 100 journals accounted for 3,189, a remarkable 43%. The New England Journal of Medicine was 1st (1323 citations); Lancet was 3rd (640); Nature 5th (535); the Journal of Virology 8th (338); the Proceedings of the National Academy of Sciences 9th (181). The Annals of Internal Medicine (172) just missed the top 10 in 11^{th} .

Among the non-DBIO 100 journals is *Eurosurveillance* 7^{th} (399) an Open Access title from the European Centre for Disease Control and Prevention. *Cell Research* 10^{th} (177) is published by Springer Nature in cooperation with a consortium of Chinese societies and agencies based in Shanghai as well the national Chinese Academy of Sciences.

COVID-19

At the time of this writing (April 20, 2020) Worldometer reports that globally there have been at least 2,465,205 confirmed cases of COVID-19 with at least 168,589 fatalities caused by this novel coronavirus. While its US arrival was initially attributed solely to an outbreak from Wuhan China, it is now confirmed by a genetic analysis of differing Covid-19 strains that some likely also came via Europe, most likely though contacts in Italy or Spain. While most countries have yet to flatten or bend down the curve in terms of new cases and fatalities, China and South Korea have made the greatest progress in slowing by far.

The first 125 articles on COVID-19 covered by the Web of Science contained records of 2,755 uses of papers spread across 51 journals.

Sources of the most often "used" COVID-19 articles * indicates DBIO 100 journal

1	*BMJ	381
2	Journal of Medical Virology	353
3	*Lancet	314
4	Journal of Korean Medical Science	155
5	Intensive Care Medicine	115
6	Nature Medicine	114
7	Canadian Journal of Anesthesia	91
8	New Scientist	86

9	Eurosurveillance	82
10	Nature Reviews Cardiology	78

Twenty seven percent (701) of these came from DBIO 100 journals. BMJ was 1^{st} (381 uses) and Lancet was 3^{rd} (314). Science, Nature, and the Journal of the American Academy of Dermatology were all present but in single digits.

Non-DBIO 100 journals constituted the majority of the list of the top ten journals. The *Journal of Medical Virology* from Wiley was 2nd (353); the *Journal of Korean Medical Science* 4th (155) is an Open Access title published jointly by the Korean Academy of Medical Sciences and Korean Medical Association. *Intensive Care Medicine* 5th (115) is a Springer Nature title. There were two offshoots of DBIO 100 journals: *Nature Medicine* 6th (114); *Nature Reviews Cardiology* 10th (78). The *Canadian Journal of Anesthesiology/Journal canadien d'anesthesie* is published by Springer Nature on behalf of the Canadian Anesthesiologists' Society, a group whose mandate includes intensive care medicine. The *New Scientist* 8th (86) is a British based STM news magazine written at a fairly high level, which proved to be an ongoing source of information for early but reliable COVID-19 cases. As mentioned earlier, *Eurosurveillance* 9th (399) is an Open Access title from the European Centre for Disease Control and Prevention.

Sources of most cited COVID-19 papers *indicates DBIO 100 journals

1	*Lancet	23
2	*ВМЈ	17
3	Canadian Journal of Anesthesia	10
4	Nature Reviews Drug Discovery	6
5	BioScience Trends	5
5	Journal of Korean Medical Science	5
7	Journal of Clinical Medicine	4

8	European Journal of Nuclear Medicine and Mo- lecular Imaging	3
8	Eurosurveillance	3
8	Lancet Global Health	3

As the number of papers available for citing was limited to a three month span, the figures are much more modest. Nonetheless, it is not surprising that two DBIO 100 journals placed 1^{st} Lancet (23) and 2^{nd} BMJ (17).

Non-DBIO 100 Journals in the top ten once again included offshoots of DBIO 100 titles including *Nature Reviews Drug Discovery* 4th (6) and *Lancet Global Health* 8th (3). The just discussed *Canadian Journal of Anesthesia* was 3rd (10), the *Journal of Korean Medical Science* 5th (5); *Eurosurveillance* 8th (3). There is not a great deal of information about *Bioscience Trends* 5th (5) save that it is published in Tokyo by the International Research and Cooperation Association for Bio & Socio-Sciences Advancement (IRCA-BSSA) Group. The *European Journal of Nuclear Medicine and Molecular Imaging* is a Springer Nature title published for the European Association of Nuclear Medicine, whose mandate includes radiology and MRIs proven important to confirming characteristically COVID-19 patterns of lung damage.

PUTTING ALL CORONAVIRUS COVERAGE TOGETHER

One fact became particularly salient over the course of this study: Researchers on any particular coronavirus used and cited a great deal of the available literature on other coronaviruses. This suggests that a combined list of the top 20 journal sources encompassing both usage and citations --- 86,359 instances --- for all three coronaviruses may provide us with an answer to the question of whether or not the DBIO 100 journals are still relevant.

Top 20 journals sourcing most used and most cited

articles for the study of SARS, MERS, & COVID-19 in the Web of Science Core Collection

* indicates DBIO 100 journals

1	*New England Journal of Medicine	11370
2	*Lancet	10064
3	*Science	9485
4	*Nature	9028
5	*Proceedings of the National Academy of Sciences	4460
6	Nature Medicine	2698
7	*Journal of Virology	2310
8	Journal of Medical Virology	2085
9	Nature Reviews Drug Discovery	1287
10	Lancet Infectious Diseases	1241
11	*Cell	1089
12	BMC Infectious Diseases	976
13	PLOS Medicine	885
14	mBIO	694
15	Emerging Infectious Diseases	630
16	Lancet Infectious Diseases	597
17	Infections Genetics and Evolution	488

18	Eurosurveillance	484
19	*BMJ	398
20	Antiviral Research	345

Eight DB100 journals accounted for over half (56%) of all articles. DBIO 100 journals held the top five slots. Every other DBIO 100 journal that could be reasonably expected to contribute to coronavirus research did so, although the numbers of papers fell below the threshold for this table: the *Annals of Internal Medicine*, *Clinical Infectious Diseases*, *Critical Care Medicine*, *JAMA*, and *Virology* among them. The DBIO 100 percentage of papers would be even higher if this current study excluded review journals which were out of scope for the original balloting.

What does this say about the DBIO 100? It says that the DBIO professionals who voted in these titles had an extraordinarily good sense of what journals were likely to be of enduring value, even for scientific and clinical crises that could not have been foreseen at the time of the poll.

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For a complete list of current board and committee members, see the Division Website at: http://dbiosla.org/inside/officers/officers.html.

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