WORKBOOK – RESEARCH METRICS PART 2.

Part A – Contextualised Article Metrics
Web of Science

Opening Web of Science (WoS)
1. Open SOLO (solo.bodleian.ox.ac.uk) and sign-in with your SSO.
2. Using the search box on SOLO, search for **Web of Science Core Collection.**
3. Click the green **Online access** link from the SOLO record for the Web of Science.
4. On the next screen that appears click **Link to Database**. This should load the search page for WoS in your browser.

Searching Web of Science
1. In the default **Document s**earch section, click on **All Fields to** open a drop-down menu. Use this menu to just search in the **Title** field.
2. Into the search box, type **A deep learning algorithm using CT images to screen for Corona virus disease (COVID-19)**.
3. Click on the purple **Search** button.
4. The following paper should appear in your search results - A deep learning algorithm using CT images to screen for Corona virus disease (COVID-19) by Wang S. (2021) European Radiology, 31(8), pp. 6096-6104
5. Click on the paper's title to open the full record in WoS.
6. Look at the right of the screen and find the **Citation Network** box.
   a. **Task: Make a note of how many times this paper has been cited in the Web of Science Core Collection.**
   b. **Task: In the Citation Network box, can you spot any metrics that might help contextualise how highly cited this paper is compared to others? Can you find out the difference between what these metrics are telling you?**

Scopus

Opening Scopus
1. Search for **Scopus** using the main search box on SOLO (solo.bodleian.ox.ac.uk).

2. On the record for Scopus that appears in your results list, click the green, **Online access** link at the bottom of the record.

3. On the next screen that appears, click either the link to **Scopus** or the link which says **Link to Database.**

Searching Scopus

1. On the main search screen, click on **Search Within** to open a drop-down menu. Use this menu to just search in the **Article Title** field.
2. Into the search box, type **A deep learning algorithm using CT images to screen for Corona virus disease (COVID-19)**.
3. Click on the blue **Search** button.
4. In your results list you should see the following article - A deep learning algorithm using CT images to screen for Corona virus disease (COVID-19) by Wang S. (2021) European Radiology, 31(8), pp. 6096-6104
5. Click on the article's title to open the full record in Scopus.
6. Look at the grey box on the right of the screen, using the information at the top of this box.
   a. **Task: make a note of how many times this paper has been cited.**
7. Scroll down the page until you reach the list of metrics just below the names and affiliations of the paper's authors.
8. Find the **FWCI** in the metrics section.
   a. **Task: Can you find out what this figure means? Does the value of the FWCI for this paper suggest that it is cited more or less than would be expected?**

Part B – Free Sources of Article Citation Data

Dimensions

Dimensions provides online attention data with its own metrics and the Altmetric doughnut. We only have access to the free version of Dimensions so searching options are more limited. In order to use dimensions you will need to set up a free account with the database.

Opening Dimensions

1. Go to SOLO (solo.bodleian.ox.ac.uk) search for **Dimensions**. When you have found the record for the **database**, click the green **Online access** link.
2. On the next screen that appears, click **Link to Database**.
3. You will be asked to set up a free account with Dimensions. Follow the on-screen instructions to set up your account and verify your e-mail address using the e-mail Dimensions will send.

Browsing Dimensions by Subject

1. Look in the left-hand panel of the Dimensions search screen under the **Filters** and find the **Reseach Categories** filter.
2. Click on the **Research Categories** filter to open a set of two further options.
3. Hover your mouse pointer over the option for **Fields of Research**. You will see a link to **browse** appear. Click this **browse** link.

4. You will now see a complete list of Fields of Research (FoR) that Dimensions uses to categorize publications.
5. Scroll down the list to find **43 History, Heritage and Archaeology.** Under this broad field, click on the narrower **4302 Heritage, Archive and Museum Studies** category.
6. A list of publications belonging to this category will now be loaded.
7. Using the **Sort by** option at the top of the results list, change the sorting order to **Citations** instead of **Publication Date**.
8. The publication with the highest number of citations in the Dimensions database will now appear at the top of the list.
   a. **Task: Looking at some of these top entries, do they appear to clearly relate to heritage, archives and museums?**
9. Look further down the results list until you find the following article (you will need to scroll down) –
   - **A definition of cultural heritage: From the tangible to the intangible by Marilena Vecco, 2010, Journal of Cultural Heritage**
10. Click on the title of the article to open the full record in Dimensions.
11. On the right of the record screen, find the **Publication Metrics** section. Click on the icon for the **Dimensions Badge** to open more detailed metrics.
12. You will now see more information about the metrics. Note that Dimensions gives you a narrative description and interpretation of some of these metrics.
    a. **Task: Is this article receiving more current interest than might be expected?**

Google Scholar

Google scholar provides citation counts for documents in search results.

1. Go to https://scholar.google.co.uk/
2. Search for **Diabetes UK evidence-based nutrition guidelines for the prevention and management of diabetes, 2018**
3. You should see a record for this paper by Dyson, Kelly *et al.* published in 2018 in your search results (*be careful!* There is a similarly titled paper from 2011!)
4. The citation data is at the bottom of the record.
   a. **Task: Note down wow many citations there are.**
   b. **Task: Now look for another citation count from Web of Science at the bottom of the record. How many citations are given here? Are they different? Note if, you are not currently logged in with your single sign on you may not see the Web of Science citation count. If not, don't worry, just move on to the next step.**
5. For one clue as to why counts may be different, click the **All *x* versions** link at the bottom of the Google record.
6. This will show all the different versions of the article that Google Scholar is using to count citations.
   a. **Task: Are all these versions the finally published journal article?** *Hint – have a look for the versions at Coventry*.

Part C – Altmetrics
Plum Analytics Metrics on Scopus

Opening Scopus
1. Search for **Scopus** using the main search box on SOLO (solo.bodleian.ox.ac.uk).
2. On the record for Scopus that appears in your results list, click the green, **Online access** link at the bottom of the record.
3. On the next screen that appears, click either the link to **Scopus** or the link which says **Link to Database.**

Finding altmetric information
1. Using the documents search screen on Scopus, type in some keywords related to a topic of interest to you.
2. Click the blue **Search** button.
3. From the results list, pick out a paper that looks relevant or interesting to you. Tip – try to avoid picking a very recent paper or one that says '*article in press*'. To help, change the results sorting option at the top of the results list to **Relevance** instead of **Date newest**. It may also help to select a paper that has several citations.
4. Click the title of your chosen paper to see the full record.
5. Scroll down the record until you see a set of metrics, this is directly after the paper authors and affiliation details are given.
6. Click the **View all metrics** link.
7. You will now see all the metrics associated with this paper, starting with the basic citation metrics with which you are now familiar.
8. Scroll down until you see the section for **PlumX metrics.** This is the section containing basic altmetrics information such as the number of tweets, news mentions, policy citations etc. associated with the article. If you see nothing here, then there are not altmetrics available for the article you have selected. Try picking a different article or search Scopus again for '**The sweet life the effect of mindful chocolate consumption**'
9. For more detail, click on the **View PlumX details** link.
10. The screen that loads provides much more contextual information the sources of the altmetric data.
    a. **Task: Have a go at exploring some of the tweets, news and policy citations. Can you access all the data sources?**

Part D – Researcher Metrics and the H-Index

Web of Science
1. As in the previous exercises above, go to the Web of Science search page.
2. Click the **Researchers** tab.

3. Run a search for Gilbert ,Sarah C, the virologist at the Jenner Institute, who co-developed the Oxford–AstraZeneca COVID-19 vaccine. Enter the surname and first name and initial into the appropriate boxes on the search.
4. Click the **Search** button.
5. From the results, select the record with a green tick - the green tick acknowledges the record which has been claimed by the author.
   a. **Task: Do you notice any other records that might also belong to Sarah Gilbert?**
6. Open the **Metrics Dashboard** to view the full **beamplot** and the author's performance in context and over time. The beamplot gives a visual overview of the number of an author's publications by year, citation percentile and geographical contribution. Further down the page click **How to read this beamplot** to get a better understanding of how to interpret the data.
7. Note that the beamplot data is trying to contextualise the number of citations a paper receives compared to other similar papers using criteria such as the publication year, subject area and document type (e.g. review article or journal article).
8. Close the Metrics Dashboard to return to the main author record.
9. In the **Metrics** panel, find and click the **View Citation Report** button.
10. This screen will give you an overview of the author's publications and the number of times they have been cited. This data is also used here to calculate the author's h-index.
    a. **Task: Note there are two figures for citation counts, one with and one without self-citations. Why do you think it might be useful to have both numbers?**
    b. **Task: Make a note of the author's h-index and the number of publications.**

Scopus

1. As in the previous Scopus exercises above, go to the Scopus database.
2. Instead of the **Documents** tab, this time select the **Authors** tab and run a search for the author, Gilbert ,Sarah C, the virologist at the Jenner Institute, who co-developed the Oxford–AstraZeneca COVID-19 vaccine.
3. Tick the record and click on the author's name to access the author's full profile. This profile summarises the number of publications and citations an author has received along with a calculation of their h-index.
   a. **Task: Note down the author's h-index.**
4. Look at the additional information with Scopus author profile:

Most contributed Topics 2016–2020 – Prepints – Topics - Awarded grants

5. Look directly underneath the summary chart of Document & citation trends. You will see two links.
6. Click **Citation overview** to view publications included in the h-index.
   a. **Task: Note down the number of publications the h-index has been based on.**
7. Click **Analyze author output** to view the overall author's performance by journal title, subject, year, and co-authors.
8. The **Author Metrics** tab also provides additional metrics for the author's performance.

Google Scholar

1. Go to https://scholar.google.com/
2. Type **Sarah C Gilbert** in the Google Scholar search box and click search. Sarah Gilbert is the virologist at the Jenner Institute, who co-developed the Oxford–AstraZeneca COVID-19 vaccine.
3. In the results list, look for a **User profile** result rather than a document or citation result.
4. In the User Profile. Find the **H-index** on the right of the screen.
5. There are two different h-indexes shown.
   a. **Task: Looking at the two h-indexes, can you find out what the difference is?**
   b. **Task: Make a note of the value of the main h-index.**
   c. **Task: How easy is it to explore the underlying citation data in Google Scholar? Can you see all the papers on which the calculation has been based?**
9. Note that Google scholar has some additional metrics including the i10-index and an indication of how much of the author's research is publicly accessible.
10. Author profiles in Google Scholar are sometimes associated with particular research areas or fields. Look on Sarah Gilbert's profile, to the right of her profile picture and you will see **Vaccines** under the author's address. To identify other top profiles in the same research area, click on **Vaccines**.

Part E – In your own time - Set up your ORCID

ORCID

It is quick and easy to set up your ORCID number at Oxford. If you already have an existing ORCID, you can link it to your Oxford University affiliation.

Registering for an ORCID number through the University website
https://register.it.ox.ac.uk/self/orcid

Follow the on-screen instructions to set up your ORCID or attach an existing ORCID to your Oxford affiliation.

More information about ORCID is here - https://orcid.web.ox.ac.uk/home