



EIFL-Mahidol Libraries Workshop
“Research Evaluation Tools & Data Science for Libraries”
May 16-17, 2017

at Mini Theater Room, 3rd Floor Mahidol Learning Center Building
 Mahidol University Salaya Campus

Workshop Schedule

Tuesday May 16, 2017

8:30 - 9:00 a.m.	Participant Registration
9:00 - 9:15 a.m.	Opening Ceremony By Dr. Ruchareka Wittayawuttikul Director of Mahidol University Library and Knowledge Center
9:15 – 10:00 a.m.	Title: Research evaluation metrics: What counts? Esteem indicators Research assessment data for Higher Education management: Multidisciplinary research assessment matrix Speaker: Niamh Brennan , Research Informatics, Trinity College Dublin
10:00 – 10:15 a.m.	Title: Discussion on research evaluation in Thailand Moderator: Iryna Kuchma, EIFL Open Access Programme
10:15- 10:30 a.m.	Coffee Break
10:30 - 11:00 a.m.	Title: Research evaluation: Why libraries? The rules Speaker: Niamh Brennan
11:00 – 11:15 a.m.	Title: Research evaluation tools and resources: ‘Traditional subscribed data sources: Scopus versus Web of Science; measuring your research impact with SciVal and InCites Speaker: Niamh Brennan
11:15 – 11:45 a.m.	Title: Non subscription-based - freely available to access or download: Google Scholar and Google Scholar Citations; Publish or Perish; Microsoft Academic Search; Scholarometer Speaker: Iryna Kuchma and Niamh Brennan
11:45-12:00 a.m.	Group Photography
12:00 - 1:00 p.m.	Lunch Break
1:00 - 2:00 p.m.	Workshop: Researcher profiling exercises: Google Scholar Citation Profile; setting up an ORCID profile; Microsoft Academic; ResearcherID and Publish or Perish Moderators: Niamh Brennan and Iryna Kuchma
2:00 - 2:45 p.m.	Workshop: Collecting data about your researchers–Presentation and Exercise Data preparation – Presentation and Exercise Speaker: Niamh Brennan
2:45 - 3:00 p.m.	Coffee Break

3:00 - 4:00 p.m.	Title: Measuring research impact: Impact Story & Altmetrics Speaker: Iryna Kuchma
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Wednesday May 17, 2017

9:00 – 9:30 a.m.	Title: Evaluating groups and institutions: Google Scholar for Institutions; U-Multirank; and Leiden Ranking Downloads Speaker: Niamh Brennan
9:30 - 10:15 a.m.	Recap: Discussing issues and solutions. Discussing the research evaluation templates for researchers and institutions in Thailand Moderators: Niamh Brennan, Iryna Kuchma and Dr. Ruchareka Wittayawuttikul
10:15-10:30 a.m.	Coffee Break
10:30–11:15 a.m.	Title: Workshop on Data Science for Libraries Introduction – What is Data Science for Libraries? Motivating case studies. - Library’s Big Data - How to become a Data Librarian Speaker: Dr.Adisak Sukul, Computer Science, Iowa State University
11:15-11:45 a.m.	Title: Overview of Data Analysis - Major components of a data analysis pipelines - Exploration of the data science process Speaker: Dr.Adisak Sukul
11:45-12:15 a.m.	Title: Computing for data science, with Python and Pandas - Excel vs. Python, who is better for working with data? - Web scraping, data cleaning and processing project, with Beautiful Soup 4 in Python Speaker: Dr.Adisak Sukul
12:15 –1:15 p.m.	Lunch Break
1:15 - 2:00 p.m.	Title: Interactive Data Visualizations, with matplotlib and bokeh - Essential charts for data visualization - Descriptive Data Analysis - The fundamental concepts and methods of statistics - How to interpret graphical and numerical summaries of data Speaker: Dr.Adisak Sukul
2:00 - 2:45 p.m.	Title: Hands-on libraries data analysis experience - Web scraping, data cleaning and processing project - Libraries data visualization - Machine Learning with Libraries data Speaker: Dr.Adisak Sukul
2:45 – 3:00 p.m.	Coffee Break
3:00 – 3:25 p.m.	Discussion
3:25 – 3:30 p.m.	Closing Session

Software requirement: -

- Python 3.x as Anaconda package. <https://www.continuum.io/downloads> Choose 64 bit installer for Python version 3.6, download the Anaconda Python 3.6 installer for your platform.
Libraries: Jupyter Notebook, pandas, matplotlib, seaborn, bokeh, bf4, scikit-learn
- Microsoft Excel 2016

Template to disseminate for the workshop participants:

Research Evaluation Template: List of data requirements

1. Vital statistics table for the individual/group being evaluated: to include, number of papers, citations, h-index, citations per paper - for the past 5 complete calendar years (e.g. 2012-2016).
2. Chart of number of papers year by year (5 years).
3. Chart of number of citations year by year (5 years).
4. Geographic heat map – image, made up of the list collaborating countries & corresponding number of papers (processed in OpenHeatMap or Tableau Public).
5. Top collaborating countries in order of number of papers, descending – in tabular format.
6. Geographic heat map – image, made up of the list of countries of the citing papers with corresponding number of papers (processed in OpenHeatMap or Tableau Public).
7. Top citing countries in order of number of papers, descending – in tabular format.
8. Top collaborating institutions, in order of number of papers, descending – in tabular format.
9. Top citing institutions, in order of number of papers, descending – in tabular format.
10. Benchmarked bar chart – if access to InCites or SciVal is available. The metric used should be ‘Impact relative to the world’ (InCites) or ‘Field Normalized Citation Impact’ (SciVal).
11. Benchmarked bar chart – if access to InCites or SciVal is available – % of papers in the world top percentiles
12. Benchmarked bar chart – if access to InCites or SciVal is available – Other views, as appropriate.
13. Altmetric Explorer: overall mentions – in tabular format.
14. Some groups/individuals may wish to highlight: commercial collaborators (add their logos to the report).
15. Some reviews may request an Excel-generated comparative heatmap listing the group of researchers and their individual papers and citations analyses.
16. Funding information, if available. Overall amount of research income; year on year and pie-chart of funding sources/Sponsors.

What should be installed on participants’ laptops before the workshop?

- Chrome bookmarks (pre-loaded, will be sent out)
- Publish or Perish installed
- Tableau Public installed
- Google Drive folder of resources (will be created)
- Download the folder ‘Sample data’ from Google Drive (the link will be provided).

Useful links: Bibliometric Data Sources (for individual researchers and groups)

Subscription-based - available through your Library and/or consortium IF a subscription has been paid.

- Web of Science
- InCites
- Scopus

- SciVal

Non subscription-based - freely available to access or download.

- [Google Scholar](#)
- [Google Scholar Citations](#)
- [Publish or Perish](#)
- [Microsoft Academic Search](#)
- [Scholarometer](#)

Bibliometric & Other Data Sources (for institutions)

- Google Scholar for Institutions
- [U-Multirank](#)
- [Leiden Ranking Downloads](#)

Researcher Profiling Services

- Google Scholar Citations
- [ORCID](#)
- [ResearchGate](#)
- [Mendeley](#)
- [Academia.edu](#)
- [ResearcherID](#)

Altmetric Data Tools & Sources

- [Altmetric.com](#)
Free tools: [Altmetric bookmarklet](#), [Institutional Repository badges](#), Explorer for Academic Librarians, [Badges for Individual Researchers](#), [API for research](#)
- [Impact story](#)
- [Kudos](#)
- UK REF Impact Database

Data preparation

- Microsoft Excel
- Microsoft Word
- Microsoft Powerpoint
- Open Office equivalents of the above
- Google Drive equivalents of the above

Data visualization tools

- [10 free infographic tools](#)
- [Google Fusion Tables](#) [maps, charts]
- [Open HeatMap](#) [maps]
- [Tableau Public \[desktop based\]](#) [maps, other charts]
- [Canva](#) [infographic tool - very easy]
- [Venngage](#) [infographic tool - easy]
- [Piktochart](#) [infographic tool]
- [VOSviewer](#) [desktop based] - co-citation charts (requires data derived from Scopus or Web of Science).

Training

- [Altmetric.com tips and tricks](#): webinars, guides, videos and more