

BIBLIOMETRICS

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OVERVIEW

You will complete an analysis of scholarly work and citations. These techniques will introduce you to ideas such as citation analysis, impact factors, and bibliometric networks. You will reflect on the affordances and limitations of these methods to determine the value of scholarly work.

DIRECTIONS

- Go to the website for [Publish or Perish](#)
- Download and install the publish-or-perish software for your computer type. There are detailed instructions about how to do this on the Publish or Perish Website. Go [here](#) if you are using a PC and [here](#) if you are on a Mac.
- Complete a series of searches using Publish-or-Perish and analyze the relationship between publications and their citations for those individuals. Record your answers to the search results in the table provided.

- **Search 1:**

- Choose two scholars from your academic field: a senior scholar and a junior scholar.
 - If you are unfamiliar with scholars that fit these criteria, here are a few suggestions:

Rank	Field	Name	Biosketch
Junior	Evolutionary Biology	Caroline Turner	Turner earned her PhD in 2015. Her lab reseresearches experimental evolution with bacteria to ask questions about how evolution works and how evolution and ecology interact.
Senior	Evolutionary Biology	Richard Lenski	Lenski earned his PhD in 1982. His lab created a research tradition in microbial experimental evolution.
Junior	Philosophy	Marta Halina	Halina earned her PhD in 2013 at UCSD. Her work concerns the philosophy of cognitive science and artificial intelligence.

Senior	Philosophy	Adina Roskies	Roskies earned her PhD in neuroscience in 1995 at UCSD and her PhD in Philosophy at MIT in 2004. She works on the philosophy of neuroscience and neuroethics.
Junior	Chemistry	Jennifer Laaser	Laaser earned her PhD in 2013. She works on polymer chemistry and polymeric materials.
Senior	Chemistry	Angela Gronenborn	Gronenborn earned her PhD in 1978. She is a structural chemist using Nuclear Magnetic Resonance techniques to determine the structures of biological macromolecules.
Junior	English	Courtney Weikle-Mills	Weikle-Mills is an expert on children's literature of the eighteenth and nineteenth centuries. Specific research and teaching interests include early American studies, transatlantic and early Caribbean studies, citizenship studies, readership and literacy, ethics, and the history of the book.
Senior	English	Gayle Rogers	Rogers is the Mellon Professor of English at the University of Pittsburgh. His works addresses the history of ideas, global modernisms, translation theory, comparative literature, critical history, and the intersections of literature, economics, and risk theory.

- Open Publish-or-Perish and select Google Scholar as your database.
- Enter the name of the person you want to search for in the Author box and select search. (This may take a while as the request rate may be limited by the database.)
- Enter the data from your search in the table below.
- Use the Clear All button before making your next search.

○ **Search 2:**

- Choose two scholars from a field in the sciences: a senior scholar and a junior scholar.
- Open Publish-or-Perish and select Google Scholar as your database.
- Enter the name of the person you want to search for in the Author box and select search. (This may take a while as the request rate may be limited by the database.)
- Enter the data from your search in the table below.
- Use the Clear All button before making your next search.

- **Search 3:**
 - Choose two scholars from a field in the humanities: a senior scholar and a junior scholar.
 - Open Publish-or-Perish and select Google Scholar as your database.
 - Enter the name of the person you want to search for in the Author box and select search. (This may take a while as the request rate may be limited by the database.)
 - Enter the data from your search in the table below.
 - Use the Clear All button before making your next search.

Google Scholar Search

Scholar	Field	Name	# of papers	# cites	H-index
Senior					
Junior					
Senior					
Junior					
Senior					
Junior					

Record your answers to the following questions:

- Compare the differences between the senior scholars and junior scholars in each field:
 - Citations accumulate over time, so senior scholars should have more citations than a junior scholar. Is this the case in your searches?
 - What is the difference in cites/year between the Senior and Junior scholar? Who would expect to have a higher cites/year number? Why?
 - Read about the H-index: [Hirsch, J. E.](#) (15 November 2005). "[An index to quantify an individual's scientific research output](#)". [PNAS](#). 102 (46): 16569–72.
 - Does the H-index provide a better measure of scholarly impact when comparing Senior and Junior scholars than just the total number of citations? Why or why not?
- Compare the differences between the scholars in different fields.
 - Why might some fields have higher or lower citation numbers than other fields?