Module 2.3: Learn - Professional Development

2.3 Professional Development

Searching for useful R packages

The **Comprehensive R Archive Network (https://cran.r-project.org/)** (better known as “CRAN”) is a network where developers submit packages to the CRAN repository which contains standard packages available for installation to ensure reproducibility across all users. Developers are constantly creating extensions and overall, contributing hundreds of packages each month to a repository that already contains tens of thousands. Let’s look at best practices for navigating for useful R packages.

Video - **The Researchers' Guide: How to Search Available R packages: (https://www.youtube.com/watch?v=drz0TJVgcqE)**

05:35

How to Search Available R packages transcript (https://docs.google.com/document/d/1MOA003rTs1mC3JGYnkEG2NQoqmgYxjS9iQuA6d6FshM/edit?usp=sharing)

This **page (https://cran.r-project.org/web/packages/available_packages_by_name.html)** from the CRAN website packages by name and links to index pages that contain information on downloading. You can easily search this F' on Windows or 'Cmd + F' on Mac. If we know which packages we are searching for, we can install them directl outlined in Section 2.2: Learn Coding.

Remember last week how we recommended you can also search in scientific literature by using literary search e **Scholar (https://scholar.google.com/)** or **ASU Library One Search (https://search.lib.asu.edu/)**. For example, l differential expression package by searching 'differential expression package' in Google Scholar (you will have a without paying if you are signed into your ASU google ID).

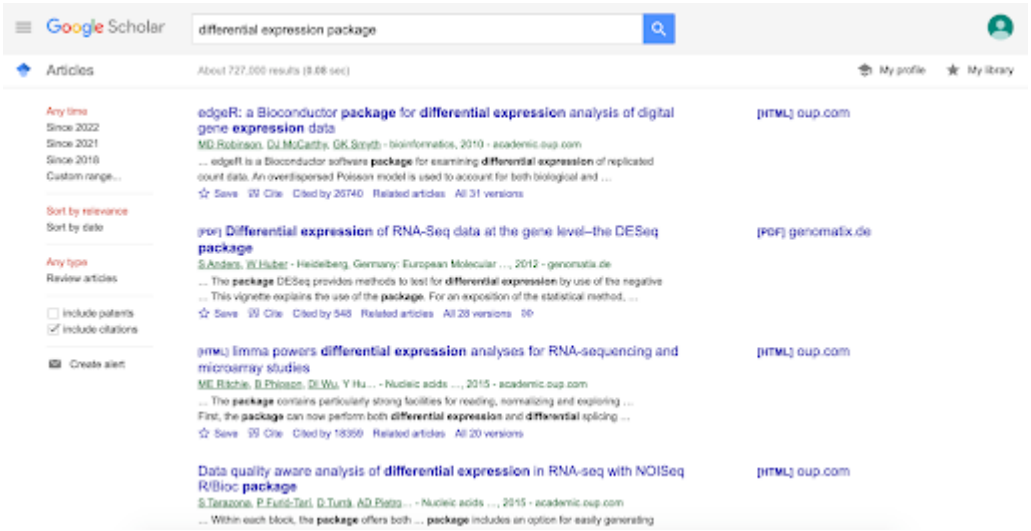

Figure. Google Scholar search results for differential expression packages.

If we click any of the links, we can look at the packages recommended by the authors, review data visualizations whether or not we want to use these packages on our own dataset. One thing to consider is the number that com This shows how many other publications referenced the article and can be telling of the effectiveness of the pack scientific papers are probably the best source for finding packages relevant to your work, we can also visit the rel favorite results or search for tutorials on YouTube to look for additional packages.