Getting Started with Tracking Your Research Impact

Judy Pasek, STEM Liaison Librarian
Agenda

• Measuring Research Impact
• Research Analytics Tools: Examples
  SciVal and InCites
  (Individual researcher perspective)
• Explore Analytics
Measuring Research Impact
Research Output Metrics

Why?

• Self-Evaluation
• Self-Promotion / Portfolio
• Tenure & Promotion Review
• Funding Justification and Support
• Recruit Students / Education
• Program Value
• Identify most productive areas of research
• Identify potential collaborators

Types

• Number of publications / products / patents
• Number of times cited / Reuse
  • Citation index / database
• Citation index: h-index
• Weighted citation impact measures: comparators to world averages
• Altmetrics: readership / downloads / mentions (news / social media)
• Reviews / Recommended reading
• Anecdotal evidence / Applications
Metrics Limitations

• None are all encompassing or definitive / Indicators
• Quantity vs. Quality
• Differences by Discipline / Scholarship & publication practices / Publication types
• Dispersion of scholarly output / Incomplete indexing
• Flawed or skewed weighting methodologies
• Inaccuracies or varied quality of publication record data / Author ambiguities
• Conflation by co-authorship; unequal contributions
• Not economic measures, e.g., Return on Investment or Opportunity Costs
• Continual changes (Hint: Set article citation alerts; automated emails; RSS notices)
## Citation Metrics Sources

### Main Article Databases
- Web of Science (Thomson Reuters)
- Scopus (Elsevier)
- Google Scholar Citations (Google)

### Research Analytics Tools
- InCites
- SciVal
- Publish or Perish
“A scientist has index $h$ if $h$ of his or her $N_p$ papers have at least $h$ citations each and the other $(N_p - h)$ papers have $\leq h$ citations each.”*

Example: Carl P Frick, Mechanical Engineering, University of Wyoming

<table>
<thead>
<tr>
<th></th>
<th>Web of Science</th>
<th>Scopus</th>
<th>Publish or Perish</th>
<th>Google Scholar Citations</th>
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<td>17</td>
<td>16</td>
<td>19</td>
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<td>20.32</td>
<td>23.35</td>
<td>26.02</td>
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</table>

# Search Strings Used

<table>
<thead>
<tr>
<th>Platform</th>
<th>Search String</th>
</tr>
</thead>
<tbody>
<tr>
<td>Web of Science</td>
<td>Author: (Frick C P OR Frick Carl P OR Frick CP)</td>
</tr>
<tr>
<td>Scopus</td>
<td>Author search: Frick, Carl Author ID: 7003445390 (includes Frick, Carl P.; Frick, C.P.; and Frick, C. P.)</td>
</tr>
<tr>
<td>Publish or Perish</td>
<td>&quot;Carl P Frick&quot; or &quot;Carl Frick&quot; or &quot;CP Frick&quot; or &quot;C P Frick&quot;, mechanical engineering</td>
</tr>
</tbody>
</table>

**Note:** The presence or absence of a space between initials affects search results.

**Note:** Addition of “Frick C” or “C Frick” would increase the number of search results substantially, into the hundreds of items, picking up works of several other authors.
ORCID Facilitates Search

Scopus Search by Carol Frost’s ORCID

Web of Science Search by Carol Frost’s ORCID
Research Analytics Tools

SciVal and InCites
Examples: SciVal
Overview Tab

Year Range: 2010-2015
Examples: SciVal Benchmarking Tab
Examples: InCites People Tile

Carol Frost
Times Cited 2006-2014

U-WY Geology
Times Cited 2006-2014

Carol Frost
Citation Impact 2006-2014

Export Data
Library Guide on Research Analytics:
http://libguides.uwyo.edu/ResearchAnalytics/Home

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