Scientific Workforce Diversity Recruitment Tool Demo

National Institutes of Health
Scientific Workforce Diversity office
Myth: “I would love to hire more women and Under Represented Minorities (URMs) but they don’t exist in my field!”

(Pipeline excuse)
Search Protocol

Myth: “I would love to hire more women and URM s but they don’t exist in my field!”

(Pipeline excuse)

“I feel uncomfortable with diversity.”

“It takes too much effort. We don’t have any resources.”

“There is no one in my immediate network that I can think of.”

“I don’t want to settle for less qualified candidates.”
Myth: “I would love to hire more women and URMs but they don’t exist in my field!”

(Pipeline excuse)
Myth Busting!
Recruitment Search Protocol
Search Protocol: 3 Basic Steps

1. Position Description

2. Systematic bibliometric search

3. Grey literature, social media, and other less systematic methods
Position Description

1. Examine the ad

2. Attend the kick-off meeting of the search committee, if possible

3. Generate MeSH (Medical Subject Headings) related to the search
   - Determine the best search bibliometric search database (or use multiple)
How to Calibrate Career Level (or Credentials)

Best to do some exploratory benchmarking

Previous OAR Directors

- Robert W. Eisinger, Ph.D.
  2015–2016

- Jack Whitescarver, Ph.D.
  2000–2015

- Neal Nathanson, M.D.
  1998–2000

- William E. Paul, M.D.
  1994–1997

- Anthony S. Fauci, M.D.
  1988–1994

OAR = NIH Office of AIDS Research
Search Protocol: 3 Basic Steps

1. Position Description

2. Systematic bibliometric search

3. Grey literature, social media, and other less systematic methods
Systematic Bibliometric Searching Database Examples

- SCOPUS®
- Web of Science™ (WOS)
- Google Scholar
- iSearch/iCite
- Field dependent databases
## Sample Comparison of Different Databases

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<th>SCOPUS®</th>
<th>WOS™</th>
<th>Google Scholar</th>
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<td><strong>Number of journals</strong></td>
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<td><strong>Proceedings</strong></td>
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<td><strong>Period covered</strong></td>
<td>1966-</td>
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*From Iowa State University Library:*
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*From Iowa State University Library: http://instr.iastate.libguides.com/c.php?g=120420&p=785310*
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<tr>
<td>Strengths</td>
<td>• More versatile search tool with advantages in functionality</td>
<td>• Covers high-impact journals</td>
<td>• Includes all types of documents - e.g., tutorials, posters, presentations</td>
</tr>
<tr>
<td></td>
<td>• International and interdisciplinary coverage</td>
<td>• Greater time period of coverage</td>
<td>• Finds more citations in &quot;most&quot; subject areas</td>
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<tr>
<td></td>
<td></td>
<td>• Better coverage of social sciences and arts/humanities than Scopus</td>
<td>• Book coverage via Google Books and free online publications</td>
</tr>
<tr>
<td></td>
<td></td>
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<td>• International and interdisciplinary coverage</td>
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</table>
| Weaknesses | • Early reports pointed out weak in social sciences and humanities  
                • Studies show still weak in sociology and physics/astronomy | • Only journals it covers are mainstream, high-impact journals  
                • Poor coverage of interdisciplinary areas and emerging fields  
                • Difficulty searching unusual author name formats - hyphenated, umlauts, etc. | • Hard to search common author names  
                • Few sorting options  
                • Questionable content quality  
                • Many non-peer-reviewed sources  
                • Have to create a Scholar Citation Profile to create reports |

*From Iowa State University Library:*
http://instr.iastate.libguides.com/c.php?g=120420&p=785310
Example: Associate Director for AIDS Research

Identifying some of the best HIV/AIDS researchers

Keywords?

- AIDS
- HIV
- Immunodeficiency Virus
- HTLV III
- Human Immunodeficiency Virus
- Acquired Immunodeficiency Syndrome
- T-Lymphotrophic Virus Type III
### AVOID USING VERBS OR DOUBLE MEANING KEYWORDS

<table>
<thead>
<tr>
<th>Document title</th>
<th>Authors</th>
<th>Year</th>
<th>Source</th>
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<tr>
<td>Prescreening whole exome sequencing results from patients with retinal degeneration for variants in genes associated with retinal degeneration</td>
<td>Bryant, L., Lozynska, O., Maguire, A.M., Aleman, T.S., Bennett, J.</td>
<td>2018</td>
<td>Clinical Ophthalmology 12, pp. 49-63</td>
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<td>A model of HIV/AIDS population dynamics including ARV treatment and pre-exposure prophylaxis</td>
<td>Nsuami, M.U., Witbooi, P.J.</td>
<td>2018</td>
<td>Advances in Difference Equations 2018(1),11</td>
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<td>Frequent implementation of interventions may increase HIV infections among MSM in</td>
<td>Sun, X., Xiao, Y., Peng, Z., Wang, N.</td>
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Can limit the date range, if needed
370,817 document results

Search within results...

Refine results

Limit to

Access type

Open Access

Other

(353,067)

Year

2018

(4,382)

2017

(15,680)

2016

(15,734)

Document title

Rational design of a trispecific antibody targeting the HIV-1 Env with elevated anti-viral activity

Authors

Steinhardt, J.J., Guenaga, J., Turner, H.L., (...), Mascola, J.R., Li, Y.

Year

2018

Source

Nature Communications 9(1), 877

Cited by

0

HIV/HCV coinfection model: a fractional-order perspective for the effect of the HIV viral load

Authors

Carvalho, A.R., Pinto, C.M., Baleanu, D.

Year

2018

Source

Advances in Difference Equations 2018(1), 2

Cited by

1

Differences in Selected HIV Care Continuum Outcomes Among People Residing in Rural, Urban, and Metropolitan Areas—28 US jurisdictions

Authors


Year

2018

Source

Journal of Rural Health

Cited by

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<td>4</td>
<td>Decreased bone turnover in HIV-infected children on antiretroviral therapy</td>
<td>Shiau, S., Yin, M.T., Strehlau, R., (...), Coovadia, A., Arpadi, S.M.</td>
<td>2018</td>
<td>Archives of Osteoporosis 2018</td>
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Can get a sense of when research really started “taking-off” for HIV/AIDS research, mid-80s.
Alternative Method
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- Soriano, V. (859)
- De Clercq, E. (816)
- Clotet, B. (728)
- Mayer, K.H. (655)
- Balzarini, J. (652)

View more
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Now… the hard part

We suggest searching social media and other online sources to confirm diversity characteristics as well as other qualifications…
Distribution of Women Among 175 Most Prolific HIV/AIDS Researchers from 1996-2014

35 of the 175 most prolific HIV/AIDS researchers are female.
Comparison by Gender of Research Indicators

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<th>Females</th>
<th>Males</th>
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<tr>
<td>Number of researchers in top 175</td>
<td>35</td>
<td>140</td>
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<tr>
<td>Median number of publications</td>
<td>214</td>
<td>271</td>
<td>***</td>
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<tr>
<td>Median percentage of publications on HIV/AIDS</td>
<td>94.19%</td>
<td>89.16%</td>
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<td>Median Field-Weighted Citation Impact</td>
<td>2.56</td>
<td>2.60</td>
<td></td>
</tr>
<tr>
<td>Median Field-Weighted Citation Impact on HIV/AIDS</td>
<td>2.57</td>
<td>2.70</td>
<td></td>
</tr>
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</table>

* p<0.05, ** p<0.01, *** p<0.001

Provided by: Elsevier Analytical: Elsevier Research Intelligence
Search Protocol: 3 Basic Steps

1. Position Description

2. Systematic bibliometric search

3. Grey literature, social media, and other less systematic methods.
Top Institution Strategy

• Top institutions in the field:
  o University of California (UC) San Diego AIDS Research Institute
  o Lifespan/Tufts/Brown Center for AIDS Research
  o The Scripps Research Institute
  o Harvard University Center for AIDS research
  o UC San Francisco – Infectious diseases
Other Strategies

- Federal RePORTER
- Council & Advisory Committees
- Network Modeling
- Societies
- Social Media
Additional Resources

Email us at diversitycatalysts@nih.gov

NIH Scientific Workforce Diversity Toolkit

The U.S. scientific research enterprise - from basic laboratory research to clinical and translational research to policy - requires intellect, creativity, and diverse skill sets and viewpoints.

Diversity
... enhances excellence, creativity, and innovation
... broadens the scope of biomedical inquiry
... addresses health disparities
... ensures fairness in our highly diverse nation

https://diversity.nih.gov/toolkit