Clarivate™

Using the Web of Science API to meet funding application requirements

Customer
California Institute of Technology (Caltech)

Challenge
The multistep data collection required to identify collaborators on multi-authored papers consumed a huge amount of time, as did the processing and vetting of the results.

Solution
Web of Science Expanded API

Outcome
By automating most of the data collection process, librarians at Caltech can better assist faculty with funding applications.

Compiling the necessary data for documentation required in funding applications can be a complicated and time-consuming process, fraught with exacting requirements and protocols.

At Caltech, librarians were fielding multiple queries from principal investigators (PIs) in physical-sciences disciplines requesting help with funding applications to the US National Science Foundation (NSF). Applications required detailed information on collaborators to help avoid possible reviewer bias. Because the Caltech librarians were assisting PIs in astrophysics, high-energy physics, and other fields in which the frequency of multiauthor papers has increased markedly in recent years, each application required a complex and time-consuming data collection and validation process. In addition, library staff were starting to field additional faculty requests that went beyond the astrophysics specialization of their databases. The problem called for a multidisciplinary resource.

"The increasingly interdisciplinary nature of collaborations, collaborators and science in general requires a reliable, comprehensive data source to ensure breadth and depth of coverage across the sciences."

Tom Morrell, Librarian, Caltech

Caltech Library's capacity received a boost in mid-2018, when staff began to use the Web of Science Expanded API as part of a broader collaboration with Clarivate.

By leveraging the API's flexibility to automate many of the steps required to process the enormous volume of information involved, library staff gained more time to concentrate on other aspects of assisting with grant applications and the faculty they serve.

"the question is, as the library moves deeper into the digital-world, how can libraries position themselves to leverage both domain expertise and expertise with working with data to better serve their faculties and the universities as a whole? With this work, we think it has shown that it is not only possible but paramount to bring together roles that had operated independently of each other to effectively address real problems that exist in the research environment."

Joy Painter, Physics, Math and Astronomy Librarian, Caltech

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