



“In a time when a global pandemic is taking many lives every day, quickly advancing research related to the disease causing the pandemic has the potential to benefit all of us.”

Finding COVID-19 grant application reviewers using Dimensions data

The University of Florida (UF) received a Clinical and Translation Science Award from the National Institutes of Health to establish a center at the university whose mission is to more quickly move research results from academic journals into clinical practice in order to diagnose, treat, prevent, and cure disease.

Established in 2008, the UF Clinical and Translational Science Institute (CTSI) has successfully helped UF researchers achieve this goal for over a decade. In 2012, social network analysts from the UF Bureau of Economic and Business Research initiated activities to help the CTSI understand UF researchers' professional networks as a means to enhance collaborations. Since then, the team has grown to become a formal program within the CTSI, known as the CTSI Network Science Program, with analyses extending beyond UF to examine professional researcher networks of other research institutions and across institutions.

In a time when a global pandemic is taking many lives every day, quickly advancing research related to the disease causing the pandemic has the potential to benefit all of us. Recognizing this opportunity, UF provided support from UF's "Creating the Healthiest Generation" Moonshot initiative, UF Health and the UF College of Medicine to advance research on COVID-19. The CTSI advertised a request for applications to UF researchers on the topic of COVID-19 for pilot research. Each application had a maximum potential award of \$100,000 with the intention that the research team would obtain extramural funding to subsequently continue the research.

Applications were received from researchers in a broad range of disciplines with co-investigators both inside and outside of the university. The CTSI was then faced with the challenge of quickly finding reviewers to read and give feedback to the panel making the funding decisions. The CTSI Network Science Program team used data from the Dimensions database to assist with this search based on the 45 applications provided.¹ As quick turnaround was one of the goals, Dimensions was used because it contained all of the data needed to perform the analysis. Additionally, the author/researcher data is provided in a format which resembles the network data structure necessary for this endeavor.

In preparation for using the Dimensions data, keywords for each proposal were extracted from the title and abstract, and subsequently manually chosen from this group based on a high level of specificity. Next, the Dimensions publications, grants, and clinical trials titles and abstracts between 2015 and 2020 were searched on these keywords for UF researchers. Out of this group, only those researchers were included who were not directly connected (no collaboration on a publication or grant application in the last 5 years) to the principal investigators and key personnel listed on the application, resulting in a list of potential reviewers. The final step ranked the reviewers on how relevant their body of work seemed in comparison to the keywords of the proposal.

¹This activity was supported by the University of Florida Clinical and Translational Science Institute, which is supported in part by the NIH National Center for Advancing Translational Sciences under award number UL1TR001427.