Scopus®

Leveraging Scopus data to build relationships across campus

With the help of Scopus data visualizations, Mary Ellen Sloane positions the library as a go-to partner for key stakeholders from deans through to students
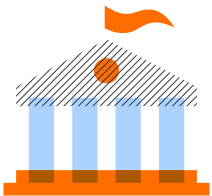

Photo by MTSUGoRaidersGo

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> "Scopus data offers librarians an easy route to serve their users, maintain relevance, increase their skill sets and understand their own faculty better."

—**Mary Ellen Sloane**, User Services Librarian for Basic and Applied Sciences at Middle Tennessee State University

As one of the US' comprehensive universities, equipping students with the knowledge and skills they need to succeed is a key focus for faculty at Middle Tennessee State University (MTSU). However, the flip side of that mission is that finding time to engage in research can be challenging, according to librarian Mary Ellen Sloane.

Mary Ellen, who is the MTSU library contact for the university's Basic and Applied Sciences department, explains: "We definitely have some struggles around high teaching loads versus funding and publications. Familiar frictions for many, but they are really exacerbated at a comprehensive institution like ours, where we are aspirational in our goals for external funding, research projects, growth of graduate programs, etc. As a result, there are many barriers, even within the library, to engaging in research-related work."

She points to the fact that although figures from the NCES (the US' National Center for Education Statistics) show the country has 4,000 higher education institutions, North America's Association of Research Libraries had just 125 members in 2021.

"I think that is a good measure of the large number of institutions that just don't have the opportunities, tools or skill sets to engage in building research capacity. So, for the past couple of years, I've focused on finding an easy on-ramp for MTSU."

Scopus: Easy access to research insights

For Mary Ellen, that on-ramp turned out to be Scopus. She now regularly pulls research data from the solution and turns it into graphics using VOSViewer — a software tool for constructing and visualizing bibliometric networks. She says: "Scopus has a lot of rich data — VOSViewer helps us analyze it in a different way. Plus, visualizations are always very impactful!"

Importantly, the graphs provide her with the perfect springboard to target and engage with groups across campus, from university leaders to administration staff.

She explains: "In my role, I spend a lot of time casting for fish, throwing out a line to see who I can connect with and demonstrate the relevance of the library to. By identifying target groups and then creating reports tailored to their needs, I've been able to build relationships with people who had no idea what we could do before."

She adds: "Tools like Scopus offer a very easy and accessible way to accomplish some of the research analysis that can be done at larger universities where more staff are available: Scopus has proved a great low-stakes way to get started here at MTSU."
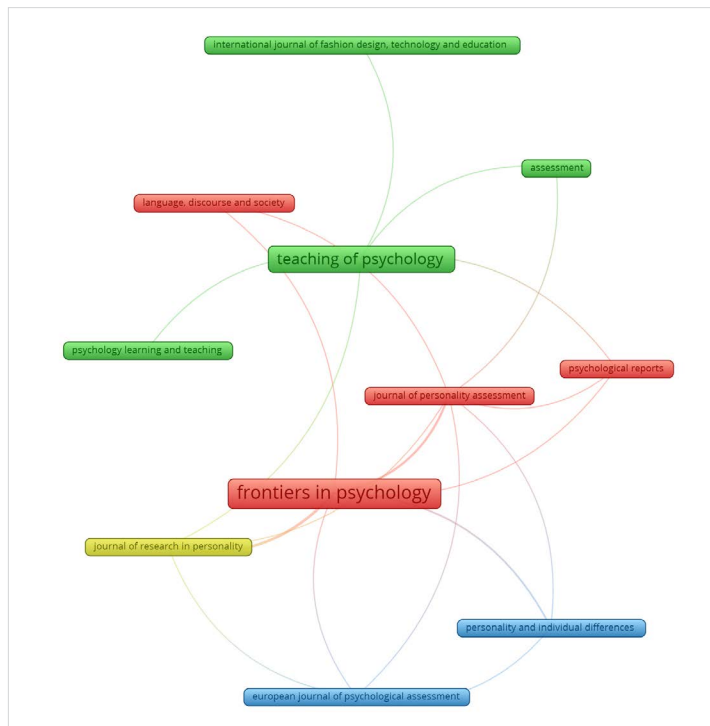
What is a comprehensive university?

In a 2019 article for Forbes, former university president Michael T. Nietzel provides the following explanation: "It's an institution that enrolls a large number of undergraduates and offers an array of master's degrees and in some instance a small number of doctoral degrees. Many were founded as teacher colleges (or "normal schools"), and a substantial number are located in metropolitan areas. Their faculties engage in research, although not with the emphasis or the extramural funding found at research universities. Consequently, they take on heavier teaching loads. Most comprehensives are public, accept the majority of applicants, and compared to major research universities or liberal arts colleges, serve a more diverse student body in terms of age, ethnicity, part-time status, first-generation-college attenders and socioeconomic background."

Scopus data-driven graphics — Mary Ellen's 7 top use cases

Mary Ellen's first step was to draw up a list of key stakeholders across campus she wanted to open a dialogue with. She identified seven. Here she shares examples of the Scopus data visualizations she develops to share with them, and explains how they add value.
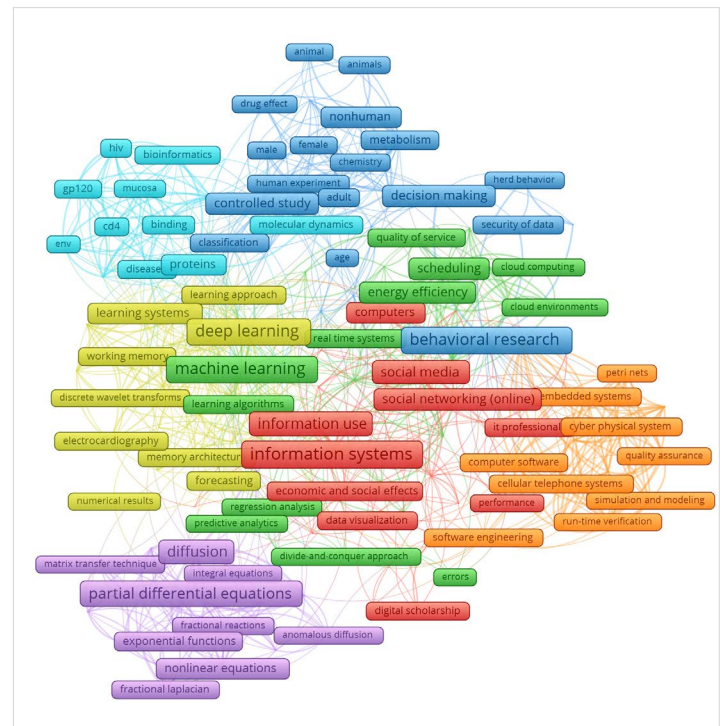
1. Research active faculty

"This is the kind of visualization I share with professors. I've been showing them who is citing their work, and which journals it is being cited in. They are really interested — some may find it useful for tenure applications, others are already tenured, and they just want to continue to have an impact in their field. While I've focused primarily on publications from our faculty, you can, of course, look more broadly in Scopus; for example, at publications by subject area, or at data from other faculties or institutions."

2. Deans and Chairs

"For faculty administrators, I focus on highlighting who is citing their faculty, and on helping them understand research activity using keywords; for example, current research their faculty is engaging in, or interdisciplinary research, which is a big focus going forward. I've been able to show them that we have information that's relevant to them. At some institutions, the ways in which the library can contribute may already be apparent, but, at comprehensive universities and colleges, libraries don't always have that connection with faculty administrators."
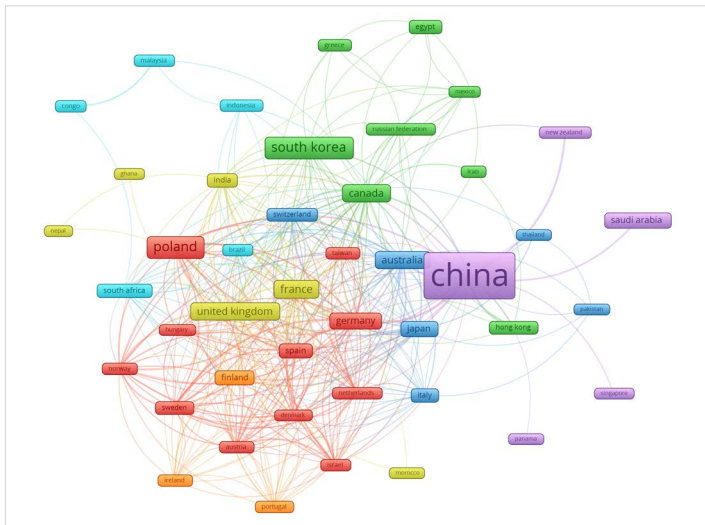
3. Research administrators

"I was recently able to help a research administration team by refining and cleaning up a list of funders supporting projects in Rwanda. Using Scopus data to go under the hood and look at funder information was something they didn't know that we can do; they didn't even know that information was out there."

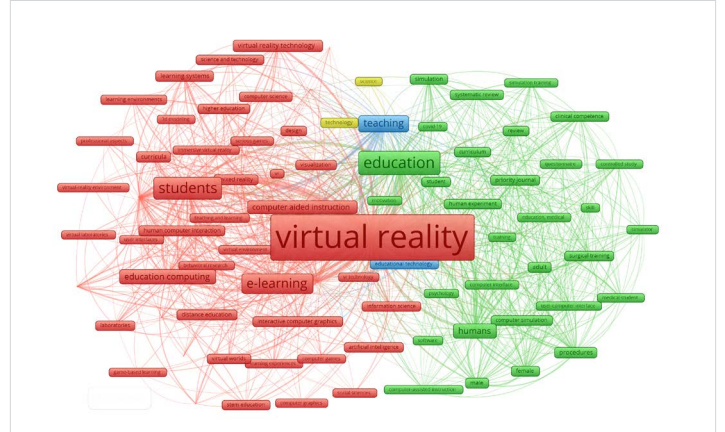|	A
1	Alexander von Humboldt-Stiftung
2	American Society of Primatologists, ASP
3	Arizona State University, ASU
4	Bundesministerium für Bildung und Forschung, BMBF
5	Cape Peninsula University of Technology, CPUT
6	Columbus Zoo and Aquarium
7	Commonwealth Scholarship Commission, CSC
8	Conservation International, CI
9	Diabetes Research Center, DRC
10	Eppley Foundation for Research
11	Eunice Kennedy Shriver National Institute of Child Health and Human Development
12	European Commission
13	Fauna and Flora International, FFI
14	Generalitat de Catalunya
15	Government of South Australia
16	Grantová Agentura České Republiky
17	Irish Research Council
18	Juvenile Diabetes Research Foundation United States of America, JDRF
19	Makerere University, MAK
20	Margot Marsh Biodiversity Foundation
21	Max-Planck-Institut für Evolutionäre Anthropologie, MPI-EVA
22	Nacey Maggioncalda Foundation
23	National Geographic Society, NGS
24	National Human Genome Research Institute
25	National Institute of Allergy and Infectious Diseases
26	National Institute of Mental Health
27	National Sleep Foundation, NSF
28	Seventh Framework Programme
29	Susan Thompson Buffett Foundation
30	Uganda National Council for Science and Technology, UNCST
31	United Nations Educational, Scientific and Cultural Organization, UNESCO
32	United States Agency for International Development
33	University of California, Davis, UCD
34	Wenner-Gren Foundation, WGF

4. International studies administrators

"We have a big emphasis on international studies at MTSU, and on developing relationships with international universities. Using Scopus data, I was able to create this visualization for our Vice Provost for International Affairs, showing him where the co-authors of MTSU authors are located. He has used it to get a sense of the international reach of our scholarship and identify potential partnership opportunities."
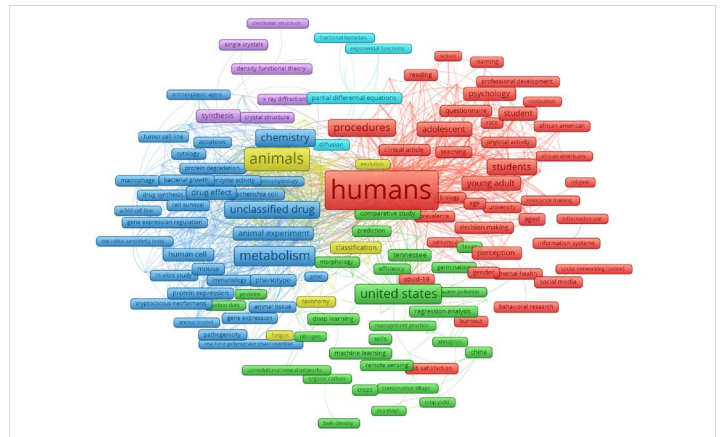
5. Library liaisons

"I really enjoy sharing information with library liaisons. This graph visualizes Scopus data on keywords in one of their subject areas. Images like these can help librarians understand which fields their faculty are actively researching and publishing in. They can use that knowledge to drive subject development, and to advise on topics like open access journal publishing."
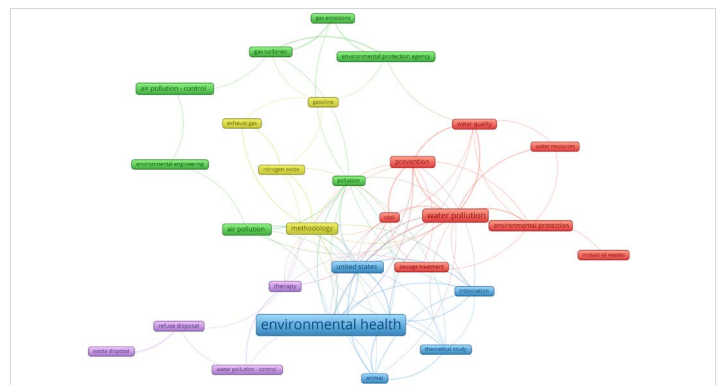

6. Library collection managers

"At our university, we have high teaching loads, and our faculty don't publish as much as our peer institutions. This graph helped one of our library collection managers understand the current level of research activity in their field and explore ways to support that."

7. Student researchers

"A student researcher was doing a longitudinal study of EPA funding, so I created this text analysis of her search results to identify common keywords, allowing us to do comparisons over time."

Bringing Scopus data visualizations to a wider audience

Mary Ellen also uses the graphs to promote the services of the library more widely. For example, she has submitted some of her analyses to the Office of Research newsletter, and has presented to senior staff.

She says: "I also did an online workshop through our faculty development center. Using a sample topic suggested by one of our materials scientists, I pulled data from Scopus and analyzed it a couple of different ways. With VOSViewer, I showed him how he could find highly-cited researchers at other institutions and emerging research areas; the kinds of questions that librarians are typically asked."

She adds: "A couple of dozen faculty attended that workshop. My hope is that they took away the fact that the library can provide them with a wide range of research intelligence."

Mary Ellen has also received support requests as a result of her outreach activities. For example, she's already been booked by the Vice Provost for International Affairs to provide data for his next annual report.

Importantly, her initiatives have also been recognized with a Fulbright Scholar award. As part of Fulbright's Africa Regional Research Program, Mary Ellen is partnering with the Karisoke Research Center, an offshoot of the Dian Fossey Gorilla Fund International, Inc (DFGF), located in Rwanda's Volcanoes National Park. Projects include assessing the range of past and existing research fields covered by DFGF and its collaborations. She is also working with them to develop tools to monitor, document and evaluate the center's impact on various fields of research. In addition, she will help them plan for a library at DFGF's new Ellen DeGeneres Campus.

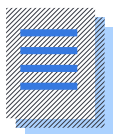## About Middle Tennessee State University

Middle Tennessee State University, situated at the geographic center of the state in Murfreesboro, is a comprehensive university that embraces its role as the destination of choice for Tennessee undergraduates, while expanding its reach nationally and internationally through signature programs and select master's and doctoral programs. The university's goal is to generate, preserve and disseminate knowledge and innovation and use scholarship to enhance teaching and public service. It is committed to preparing students to thrive in their chosen professions and a changing global society. With an enrolment of around 22,000 students, it offers 300+ undergraduate and graduate degrees of study in diverse disciplines that prepare students for high-demand careers. The university is the number one producer of graduates for the Greater Nashville economy, has featured in the Princeton Review's list of the Best 385 Colleges in the US for three years in a row, and is the top destination for transfer students in Tennessee.

About Scopus®

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records

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author profiles

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