




Discovery Themes

A guide for interested faculty



The complexity of the problems we tackle and the uncertain funding climate we face are pushing collaboration beyond individual departments and increasingly beyond the borders of the university itself.



“I found most of my collaborators in the Discovery Themes. This is vital because modern research has to be collaborative to achieve maximum results.”

*Assistant Professor
Emmanuel Hatzakis,
[Foods for Health](#)*

Why were the Discovery Themes created?

Ohio State established the Discovery Themes to leverage the university’s strengths to better address complex societal problems that require diverse theoretical expertise and cultural perspectives. The initiative does this by nurturing inventive cross-college alliances among faculty and enabling strategic partnerships with allies in business, government, the humanities and the arts, foundations, and non-governmental organizations.

All faculty members are encouraged to explore how they might connect their scholarship with that of their colleagues through the Discovery Themes. Some of these connections will lead to collaborative research projects, while others will help provide perspectives that animate an individual faculty member’s pursuit of a thorny problem or analysis. They are all valuable — and all part of the process we embrace as Discovery at Ohio State.



“Being part of the Chronic Brain Injury program helped me find and get to know people across departments and colleges who are doing work relevant to mine.”

*Assistant Professor
Liz Kirby,
[Chronic Brain Injury](#)*

Q What are the Discovery Themes?

These are broad areas of scholarly strength that Ohio State is augmenting to better address challenges in health and wellness, energy and environment, food security and production, and humanities and the arts. Faculty teams have conceived and developed eight focus areas within and across these four themes, reflecting the bottom-up approach that the initiative embraces.

- Chronic Brain Injury
- Food and AgriCultural Transformation
- Foods for Health
- Infectious Diseases
- Materials and Manufacturing for Sustainability
- Sustainable and Resilient Economy
- Translational Data Analytics
- Human Dimensions of Global Challenges



“The Infectious Diseases Institute helped me connect and collaborate in research with amazing faculty outside of the Wexner Medical Center.”

*Associate Professor
Debbie Goff,
[Infectious Diseases
Institute](#)*

Q What’s driving the Discovery Themes?

It comes down to reimagining problem-solving. Challenges like food security, infectious diseases, sustainability, and global migration transcend any one discipline. That’s why the Discovery Themes are designed to expand collaborations across the university and build external partnerships. Doing this will increase Ohio State’s capacity and competitiveness for innovative strategic alliances.



“TDAI helped me establish collaborations with Fujitsu Laboratories of America, and get my first grant from them, to work at the intersection of the Internet of Things and text mining.”

*Assistant Professor
Huan Sun,
[Translational
Data Analytics
Institute](#)*

Q What kind of cross-college collaborations are going on in the Discovery Themes?

Though a very small sampling, these examples suggest the range of creative inquiry that’s taking place:

- Faculty in the arts have teamed up with neuroscientists to examine the role of music in treating aphasia, a communication disorder that can result from traumatic brain injury.
- Faculty from Veterinary Medicine, Public Health, and Natural Resources are studying if antibiotic-resistant bacteria from health-care facilities are contaminating lakes and rivers, potentially jeopardizing humans and livestock.
- Agriculture and data science researchers are building an informatics framework that will analyze government and social-service data to improve how food is produced, inventoried, and distributed in urban areas, beginning with Columbus and Sacramento, Calif.

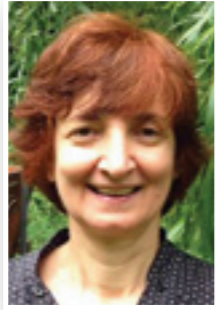


“Thanks to SRE, I have collaborated on two successful federally funded interdisciplinary proposals totaling more than \$3 million within my first year at Ohio State.”

*Associate Professor
Yongyang Cai,
[Sustainable and Resilient
Economy](#)*

Q How have the Discovery Themes increased interdisciplinarity here?

Through the initiative, the administration has provided the structure, resources, and commitment to expand interdisciplinary collaboration. More than 950 faculty are involved in the Discovery Themes, including more than 125 new faculty hired jointly by DT programs and individual colleges. Many of these hires have expertise that cuts across multiple disciplines. In addition, the Discovery Themes have supported the establishment of two university-wide interdisciplinary institutes, in translational data analytics and infectious diseases.



“The Global Mobility Pilot Project and the collaborations at Ohio State and other universities it generated inspired me to refocus my research.”

*Professor
Yana Hashamova,
[Humanities and the Arts](#)*

Q What benefits do the Discovery Themes offer faculty?

- New funding sources through seed grants (\$2.2 million to date), external partnerships, and opportunities for multi-investigator grants.
- Strategic resources that include mentoring, proposal development assistance, and in some cases, shared postdocs.
- Research grants that enhance faculty-student collaborations.
- An expanded pool of new colleagues and networking opportunities.
- Assistance in connecting with private- and public-sector stakeholders who support your research area.
- Programming, such as seminars, workshops, and training in public speaking.
- Opportunities to present research.
- Collaborative communities open to all.

Of course, each Discovery Themes program offers subject-specific benefits for faculty affiliates. For example, the Translational Data Analytics Institute connects affiliates to datasets, databases, and opportunities to test technologies and platforms with partner organizations. The other programs offer comparable benefits.



“By its internal and external engagement, InFACT embodies the education, research, outreach, and leadership of the 21st century land-grant university.”

*Professor Michael Mercil,
[Initiative for Food
and AgriCultural
Transformation](#)*

Q How can I get involved in Discovery Themes?

Reflecting novel goals and strategies, and unique leadership, each of the eight programs operates and continues to evolve differently. Likewise, they vary by the degree of involvement they ask of their affiliated faculty. What they all have in common, however, is the desire to bring together faculty and external partners who share a passion for creative inquiry and understand the power of collaboration to solve real-world problems. The first step in getting involved is reaching out. Program employees will gladly answer your questions and put you in touch with the faculty leads. So take a minute to connect. It might open doors you didn't know existed.



“The Discovery Themes have allowed us to add to and coordinate our personnel, programs, and equipment in manufacturing — and present ourselves as a world leader, which we are!”

*Professor Glenn Daehn,
[Materials and Manufacturing for Sustainability](#)*

How can I contact the programs?

[Chronic Brain Injury](#)

discovery.osu.edu/CBI

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[Humanities and the Arts](#)

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