

Research Analytics 101

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Friday, October 4, 2024

Research Analytics



Research, Innovation & Impact
University of Missouri

What We'll Cover

- Overview of the Research Analytics (RA) Team
- Our Scope
- Reporting
- Trend Analysis
- Decision Support
- Competitive Intelligence



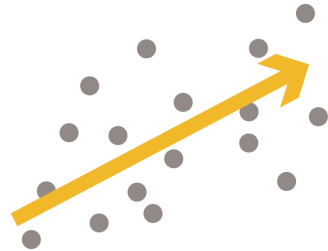
Who are we?

RESEARCH ANALYTICS

The Research Analytics team in the Division of Research, Innovation & Impact provides research and sponsored projects reporting, analyses and strategic decision support for the MU community.



REPORTING



TREND ANALYSIS



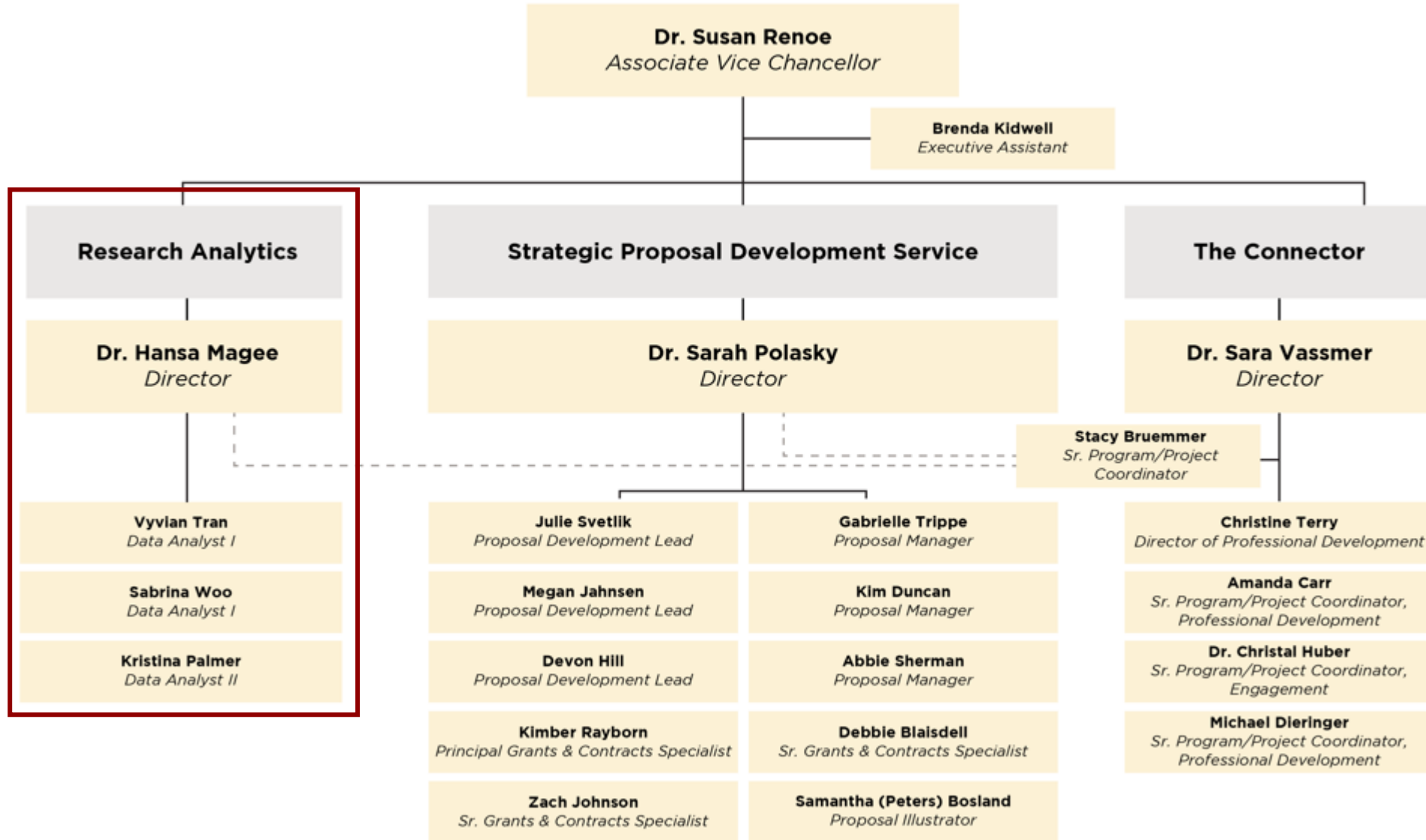
DECISION SUPPORT



COMPETITIVE INTELLIGENCE

To request Research Analytics support, email us at researchanalytics@missouri.edu.







Our Scope

Our scope: sponsored projects and research (HERD) reporting

Yes

- Routine/periodical reporting
- Troubleshoot data issues
- Determine reporting standards for MU
- Share/train/communicate on data
- Ad hoc data
- Federal funding analyses
- HERD survey



Not our scope

No

- Fixing data issues
- Reporting for other UM campuses
- Academic Analytics
- MyVita
- Data warehouse maintenance/administration



What is a sponsored project?

Sponsored projects are funded activities by **external** entities for **specific** purposes.

Components:

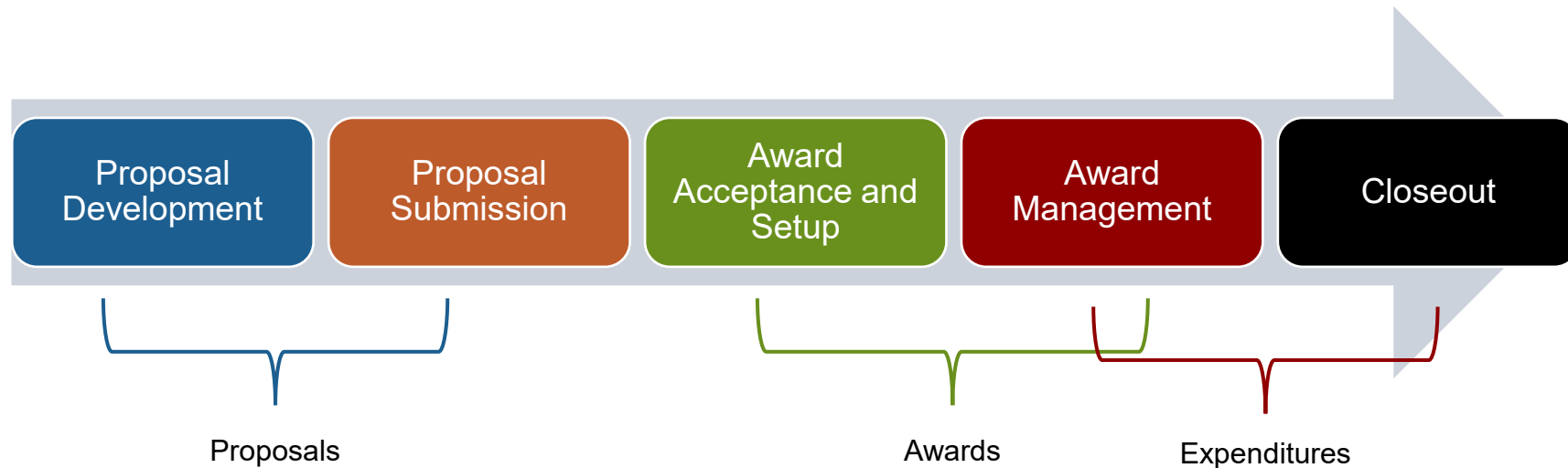
- Statement or scope of work
- Budget for funding
- Designated Principal Investigator (PI) or Program Director (PD)

Link: <https://research.missouri.edu/sponsored-programs-administration>



Overview of Sponsored Projects Reporting

Three main buckets of data: Proposals, Awards, and Expenditures



Higher Education Research and Development (HERD)

- Survey conducted by the National Center for Science and Engineering Statistics (NCSES) within the National Science Foundation (NSF).
- Primary source of information on R&D within higher education
- Rankings/AAU metrics
- Collects data on:
 - R&D expenditures
 - funding sources
 - related research activities

Source	Purpose			2023 Total
	Research	Instruction	Other	
Internally at MU*	206M			
Sponsored Projects	256M	3M	79M	338M
2023 HERD Total:	462M			

* Institutional, gifts/donations, cost share, unrecovered indirect costs





Monthly Reporting

Monthly Excel & PDF Reporting

Static Reports:

- Snapshot once a month for data from 2020 through the previous month.
- Updated 5th working day after the first of the month

SEPTEMBER 2024						
SUN	MON	TUE	WED	THU	FRI	SAT
1	2 Labor Day	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30 					

OCTOBER 2024						
SUN	MON	TUE	WED	THU	FRI	SAT
		1	2 	3	4 	5
6	7 	8	9	10	11	12
13	14 Columbus Day	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31 Halloween		

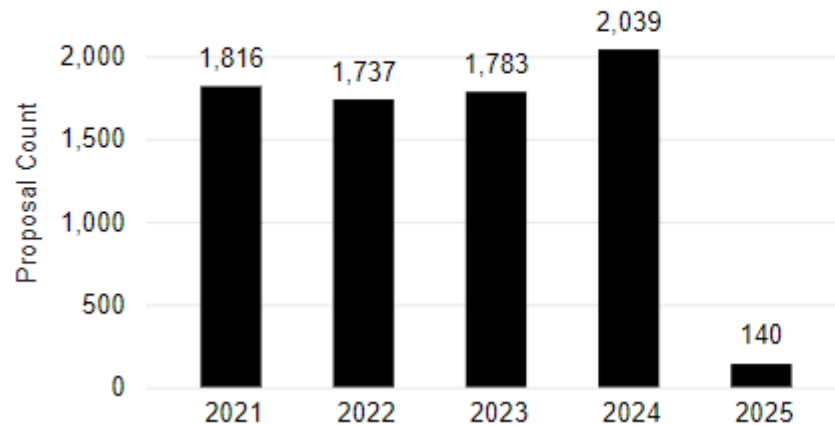


Monthly Power BI Dashboards

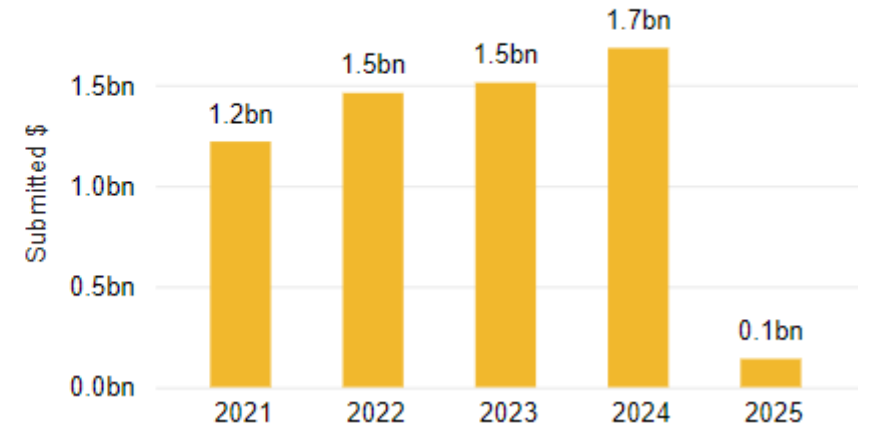
- Updated at the same time as the pivot table and PDF reporting.
- We will have new dashboards available this calendar year.
 - Old dashboards will be available until new December monthly data refresh

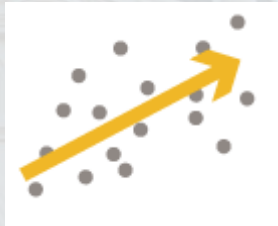


Proposal Count by Year



Submitted \$ by Year

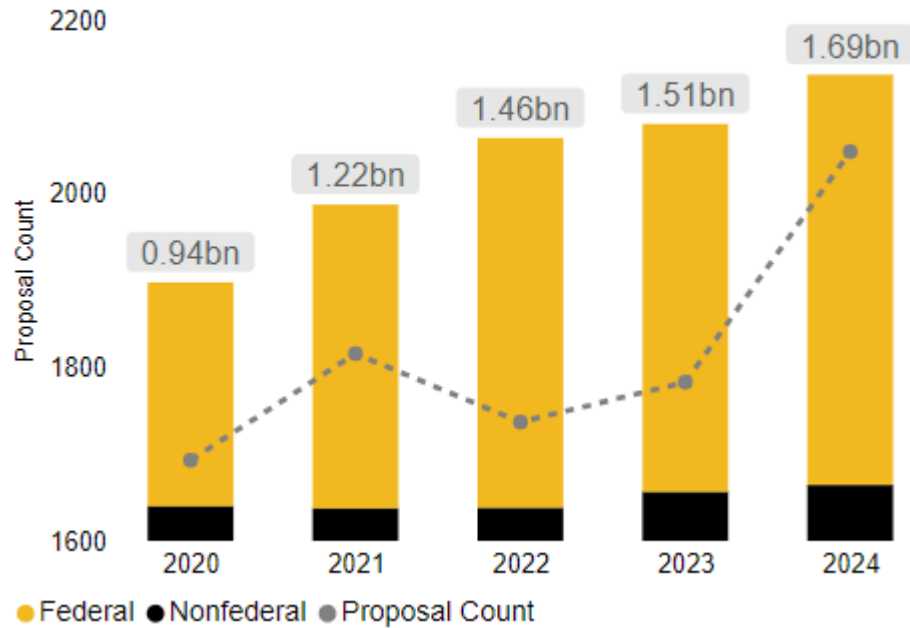




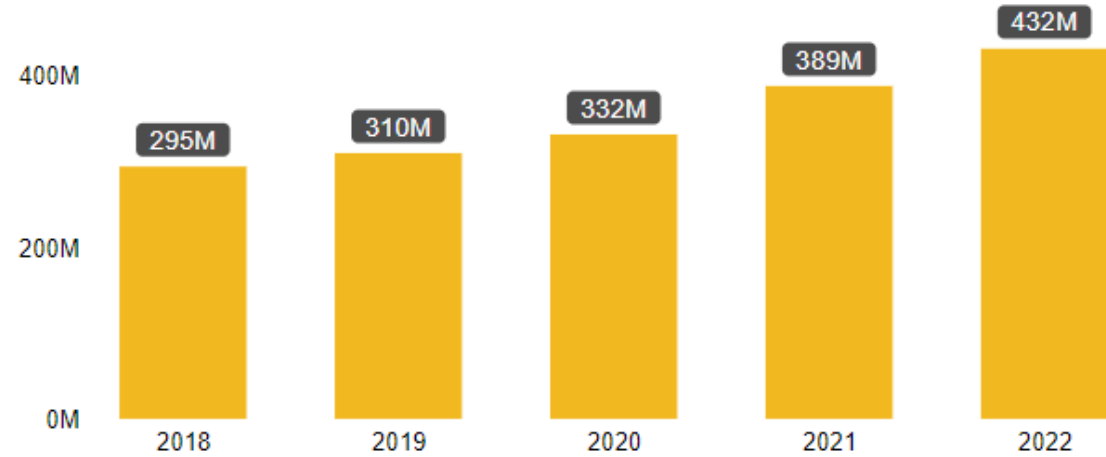
Trend Analysis

Trend Analysis

Proposals \$ and Count Trend



HERD Expenditures





Decision Support

Decision Support

Ad hoc requests

- Email researchanalytics@missouri.edu with your request and **deadline**
- Turnaround can be day-of depending on urgency and complexity
- Supports faculty research and grant submissions
- Strategic decision support analyses for trends, goal setting, national benchmarking and targeted initiatives
- Project-based analyses
- Dimensions



Competitive Intelligence



Competitive Intelligence

Collect



Gather data relevant to business purpose. Sources may include databases of internal sponsored projects, human resources, public federal grants, publications, patents and more.

Analyze



Transform and visualize data to gain useful insights using analytical tools such as Excel, Power BI and Python.

Interpret



Provide actionable insights to answer business questions and realize goals. Deliverables are tailored to be concise and accessible for the intended audience.



Competitive Intelligence

- Expected turnaround time for a CI analysis is 10-15 business days.

Deliverables

- Funding landscape:
 - Types of funding in specific research areas
- Sponsor analysis:
 - Current and future research funding by sponsors
- Program analysis:
 - Funding interests of specific programs
- Peer funding landscape:
 - Competitors' funding pursuits
- Capacity analysis:
 - Mizzou's strength and weaknesses



CI Program Analysis



Opportunity/Request

- NSF announced CHIRRP funding opportunity (3/21/24)



Collect

- Attended webinar
- CHIRRP website
- Proposal Activity
- Dimensions



Analyze

- MU Earth Science
- Specific keywords
- Sponsor types
- Investigators
- Existing partnerships



Interpret

- Actionable insights
- [CHIRRP PDF](#)
- Completed 4/3/24



Thank You!



Next Research RA Event:

October 11: Introduction to
Dimensions
12:00 PM – 1:00 PM

October 25: Federal Budget
Overview
12:00 PM – 1:00 PM



NEW! Research Analytics Dashboards:

Check out one of the Power
BI demos.
October 17 or October 31
1:00 PM – 2:00 PM



Contact Email:

researchanalytics@missouri.edu



Dimensions Event: 2024

Altmetric & Dimensions
Academic User Day Date:
October 23
11:00 AM – 4:00 PM



Free T-Shirt: Attend all
three October events and
you're eligible to receive
a free T-shirt (while
supplies last).