



From Dark to Light: Leveling Up Research Analytics Expertise

By Baron G. Wolf, Robert Pilgrim, and Lou Hurst

Overview

The first-ever national Research Analytics Summit was held in Albuquerque, New Mexico in March 2024 and successfully brought together experts and administrators to focus on the integration of data analytics, analysis, benchmarking, and competitive intelligence in research administration. The summit featured workshops, presentations, discussion sessions and the launch of the Research Analytics Mentorship Program (RAMP) to enhance data proficiency and promising practices among professionals working in a variety of positions within different types of institutions. The summit was supported through a conference grant from the U.S. National Science Foundation's GRANTED program (grant no. 2324388). The GRANTED program within the U.S. National Science foundation is focused on addressing systemic barriers within the nation's research enterprise by improving research support and service capacity at emerging research institutions. The program aims to identify transformative approaches and innovation within the research ecosystem to share knowledge, create skill development, and serve researchers throughout the scientific community regardless of the type of institution. The GRANTED program has a core focus on reducing barriers and increasing access to research funding at emerging research institutions and minority-serving institutions. The support received from the GRANTED program marked a significant step toward advancing innovation, networking, collaboration, and promising practice development within the field of research analytics. More than 195 participants attended the summit from more 145 institutions and organizations from across the United States, Canada, the United Kingdom, and the United Arab Emirates.

Steering Committee

The summit was led by Dr. Baron Wolf, Assistant Vice President for Research & Director of Research Analytics at the University of Kentucky, who also served as the principal investigator and project director. The steering committee for the summit included notable experts in the profession, among them Ms. Lori Schultz, formerly Assistant Vice President for Research Intelligence at the University of Arizona and who recently accepted a new position at the University of Texas-San Antonio. Dr. Andrea Christelle, Vice Provost for Research at Diné College, Dr. Robert Pilgrim, Associate Director for Data Strategy and Insights at the University of Arkansas's Division of Research and Innovation, and Ms. Louetta Hurst, Proposal Development Officer at the University of Kentucky. The committee was able to develop a broad, diverse and enriching mix of experience in institutional research, strategic planning, data analytics, and research administration.

Importance of Data-Informed Decision-Making

In the ever-changing domain of research administration, the significance of data-informed decision-making is increasingly considered essential. There is a growing consensus among research administrators that it is imperative to build a data analytics strategy into strategic planning and daily work, but they rarely have formal opportunities to network and learn about the data specific to their work, and how to use it effectively. This need prompted organization of the inaugural National Summit on Research Analytics, which has now established itself as a pivotal gathering for professionals in this emerging field within the research enterprise. The summit effectively highlighted the crucial areas where data-informed decision-making intersects with research administration. Many attendees shared that while they previously considered data analysis and the use of business intelligence tools ancillary to their primary roles, data analysis is now a core function. The event was designed to empower professionals by providing them with the necessary skills and knowledge to enhance their performance and the operations of their respective institutions. This shift is aimed at transforming their approach to encompass a more analytics-driven perspective in their work. The summit provided a host of outcomes, including the introduction of a professional mentoring program, a group to network with well beyond the conference, avenues for professional development, and access to materials from the conference proceedings. Designed to facilitate collaboration, the summit enabled participants to establish invaluable networks with fellow professionals.

The summit responded to the urgent necessity for integrating sophisticated data analytics in research administration. It highlighted the pressing demand for professionals equipped with data-centric strategic capabilities, emphasizing the importance of convening such an event at this time. In an environment where effective grant management and strategic institutional planning are paramount, the summit provided essential resources and connections, fostering a community poised to pioneer advancements in research analytics.

Presentations & Sessions

The agenda for the summit included a diverse array of sessions covering a wide range of research analytics topics. Sessions encompassed hands-on workshops for applying research analytics tools, dialogues concerning the function of research analytics in various institutions, and innovative talks on integrating artificial intelligence into research administration. These sessions tackled both the technical and strategic facets of research analytics, equipping attendees with a comprehensive understanding of the field. The summit kicked off with an opening plenary panel titled "What is Research Analytics?" featuring Dr. Baron Wolf, Ms. Lori Schultz, Dr. Robert Pilgrim,

Dr. Andrea Christelle, and Ms. Lou Hurst, setting the stage for the summit by defining the scope and impact of research analytics. The sessions throughout the summit were focused on a framework of research analytics capabilities that includes both Human Capital and Technology and Skills. The framework for the summit is illustrated in figure 1.

Session themes included:

- **Collaboration & Institutional Strategy:** Sessions like "Bridging the Gap for Research Analytics" by Ashley Stauffer and Paulina Kryz (Penn State), and "It's about time: Gaining insights from turnaround time metrics" by Christopher Perkins and Julia Zappi (Rutgers U.) which focused on leveraging data to improve workload performance and services.
- **Analytics & Data Governance:** Dr. Robert Pilgrim (U. of Arkansas) led a session on empowering analytics in lean teams, while Ms. Lori Schultz (formerly U. of Arizona, currently U. of Texas-San Antonio) delved into "Data Governance & Stewardship 101," reflecting the summit's focus on managing and leveraging data effectively.
- **Training & Development:** In keeping with the educational objectives of the summit, several hands-on training sessions were designed to build skills, such as "Introduction to Descriptive Research Administration Statistics using Excel" by Alex Wagner (Emory U.).
- **Innovative Technologies & AI:** The application of AI and advanced technologies in research analytics was a notable theme, with sessions like "Unlocking Opportunities: Leveraging Generative AI in University-Sponsored Programs Research Administration" by Lisa Wilson, Alex Wagner, and Tubal Yisrael (Emory U.), showcasing cutting-edge approaches.
- **Research Impact & Collaboration Networks:** The agenda included discussions on building research collaboration networks and leveraging data for growth and infrastructure design, such as "CollabNext: A person-focused open knowledge graph for collaborations with emerging researchers by Lew Lefton (Georgia Tech).
- **Policy, Ethics, & Data Use:** Sessions such as "Do Your Policies Stand Up to Your Data?" by Ms. Lori Schultz (formerly U. of Arizona, currently U. of Texas-San Antonio) addressed how one can use data to validate an existing institutional policy, or define the need for one.



Figure 1. Research Analytics Capabilities Framework

The summit concluded with a session featuring the steering committee, encapsulating the insights and learnings from the two-day event, which included open discussion and dialogue. Overall, the Research Analytics Summit 2024 offered rich interactions through discussions, from foundational concepts and strategic collaborations to the ethical use of data and the latest technological innovations, highlighting the multifaceted nature of research analytics and its pivotal role in advancing academic and institutional research objectives.

Feedback from Attendees: Themes & Directions

To assess the effectiveness of the Summit in achieving its objectives, an evaluation survey was administered to attendees following the event. A total of 96 responses were received. The overwhelming majority (99%) of respondents stated that the conference met their expectations overall, while 93% stated that, based on their experience, they would “definitely” or “probably” attend a similar conference in a future year. Further, large majorities of respondents indicated that they experienced benefits from attendance that aligned with project objectives:

<i>Did the Summit help you...? : respondents answering “Definitely” or “Somewhat”</i>	
... develop expertise in research analytics?	85 (89%)
... understand how investing in research analytics can benefit your institution?	95 (99%)
... learn best practices in research analytics?	90 (94%)
... discover research analytics options that are scalable for your institution?	89 (93%)
... learn about practices for responsible research evaluation and assessment?	83 (87%)
... access opportunities for mentorship in research analytics?	89 (93%)

Importantly, a key benefit of the Summit was that members of different institutions, including those of different scales and types, could gain ideas from one another’s existing research analytics strategies. A total of 81 (84%) of respondents reported that this was a primary goal in attending the summit, and as reflected in open-ended feedback, many respondents felt this goal was satisfied (see sample comments below). Another common theme expressed was a new sense of empowerment to advocate for research analytics with institutional leaders and executives—i.e., knowing how to “make the case” for its importance and obtain their support for further institutional investment (although some respondents still expressed concerns or anticipated future challenges in this area).

In terms of personal professional development, many respondents shared their excitement about the ability to network with colleagues engaged in similar work at other institutions—including through mentorship—and to become part of an emerging community of practice.

Sample Comments from Attendees

“[The Summit] helped me understand the field of Research Analytics and where it sits within Research Administration which will enable me to make more connections at my institution for projects to improve our departmental (and hopefully, institutional) processes.”

“[I] gained exposure to a few different avenues of research development to pursue, as well as a group of professionals nationally that are working on similar initiatives.”

“It allows me to have a better informed conversation with my leadership team about what other institutions are doing and how it is working which I hope will allow for more changes at my current institution.”

“I left the conference with ideas for what data I should be capturing and how better to present it. I learned how research analytics can help with positioning my college to be more competitive in a way that will support grant seeking and grad student and faculty recruitment.”

“My institution already provided me with access to data and programs that I did not have prior to the summit. I am meeting with my Dean next Monday to start looking at the analytics I can provide. Overall, moving along in a new and enhanced direction.”

Research Analytics Mentorship Program (RAMP)

A notable component of the summit was the creation of the Research Analytics Mentorship Program (RAMP). This program was carefully crafted to fill a gap in the research administration community – the advancement of data analytics proficiency and sharing of best practices. Twenty-five individuals from various institutions have volunteered to serve as subject matter experts and mentors to more than sixty-three individuals. These sixty-three mentees will meet several times per month over the next 6-months to learn, work on projects, and end with a “Lightning-Talks” as a group. This program allows for more one-on-one development, networking, and capacity building to meet the

specific needs of mentee institutions. Through the GRANTED funded project, the RAMP program is supported to provide financial support to mentors. This will ensure they have the dedicated time to support mentees in this continued learning experience.

RAMP was designed with several objectives, aimed at fostering a supportive and collaborative environment for research administrators from diverse institutional backgrounds. The main goals of RAMP included:

- **Developing Proficiency:** Enhancing the data analytics capability of research administrators, allowing them to interact with data more efficiently and with greater confidence.
- **Promoting Innovation:** Stimulating the generation of new institutional analyses to provide insights into the operational and strategic elements of research administration.
- **Fostering Engagement:** Establishing a platform for active involvement in regional and national conversations on sophisticated research analytics within the higher education field.

RAMP represented more than a mentorship scheme; it is an investment in the future of research analytics within the research administration field. By pairing experienced analytics professionals with those looking to improve their skills, RAMP is designed to benefit not only individual participants but also the collective progression of the field. The program aims to:

- **Energize a Community:** Connecting colleagues and creating mentor-mentee relationships, RAMP fostered an active and dynamic community of practice.
- **Transfer Skills:** Knowledge and abilities disseminated through RAMP were anticipated to have a cascading effect, empowering research administrators and augmenting the analytics acumen within their respective institutions.
- **Advance Higher Education:** The concerted efforts of RAMP participants were intended to push the envelope on the application and discourse of research analytics in higher education.
- **Develop the Network:** RAMP is envisioned as the beginning of an ongoing dialog and skill-building network focused on research analytics in higher ed.

Conclusion & Next Steps

The national summit on research analytics, in conjunction with the RAMP mentorship program, presents a considerable advancement for research administrators. This initiative allowed them to deepen their understanding of research analytics and embrace data-informed

decision-making. The event underscores the summit’s dedication to capacity building and professional empowerment. It marked a fundamental shift towards preparing a workforce adept in data, ready to navigate the complexities of the contemporary research environment. As the community moves ahead, both the summit and RAMP are expected to steer the strategic direction of research institutions forward, nurturing a climate of innovation and sculpting the future of research and scholarship. This transformative experience put participants at the leading edge of research administration. ■

For more information on future participation, the community is encouraged to visit the summit website and explore the summit repository which includes sessions and recorded content from the meeting:
https://uknowledge.uky.edu/research_events2



Baron G. Wolf, PhD, Assistant Vice President and Director, Research Analytics is a national leader in data-informed decision making and the use of analytics within research administration. His own research has been funded by the U.S. National Science Foundation and the Institute of Museum and Library Services. Dr. Wolf served as the project director and chair of the Research Analytics Summit planning committee. He can be reached at baron.wolf@uky.edu



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