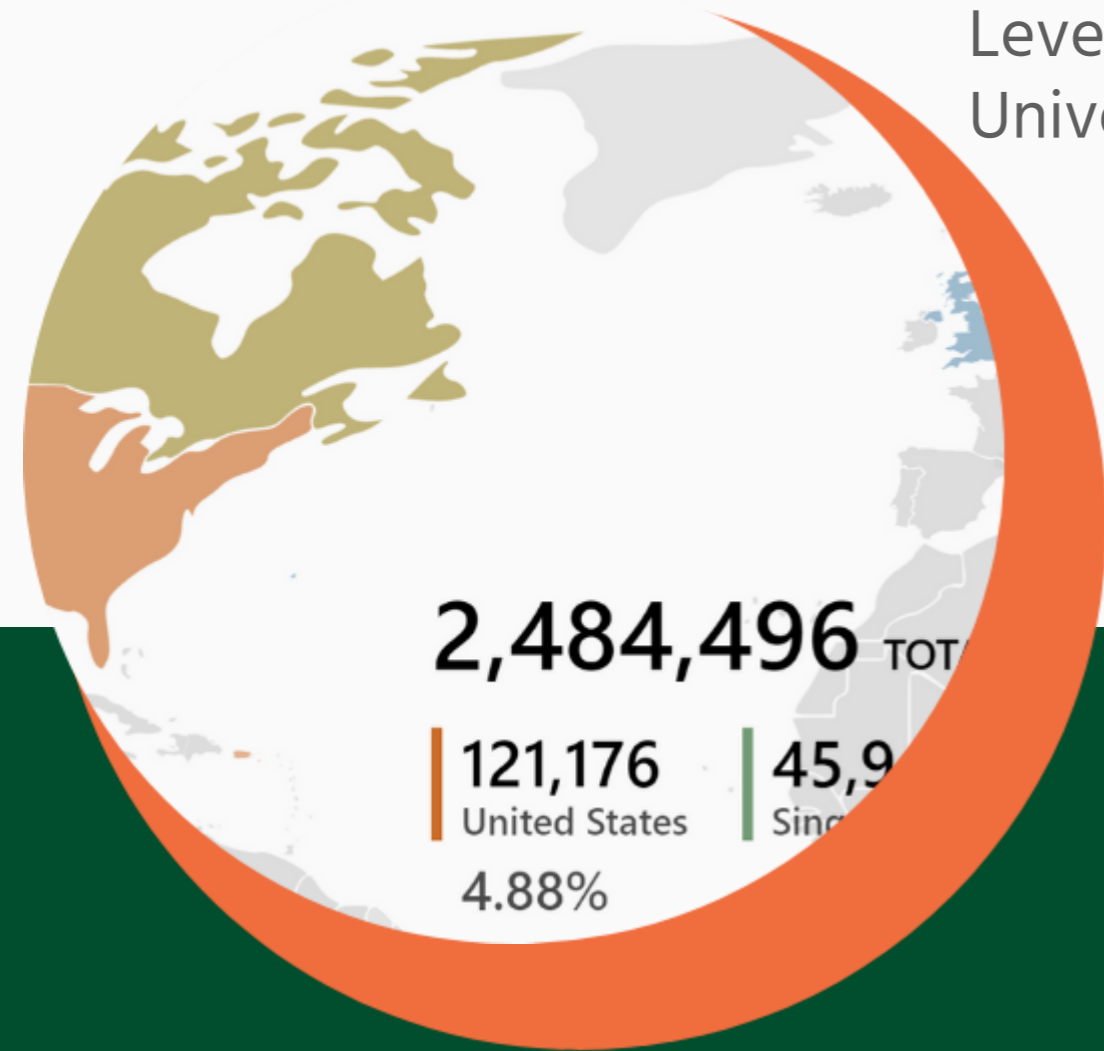


From Scratch to Launch

March 2023

Leveraging UM Libraries' RIM System to Cultivate University-wide Partnerships & Support Faculty Research



Kineret Ben-Knaan, Angela Clark-Hughes & Elizabeth Gushee

University of Miami | Fast Fact



\$375M

FY21 Research Expenditures



3.4K

Faculty, including 73 librarians



12K

Undergrads

7K

Graduates

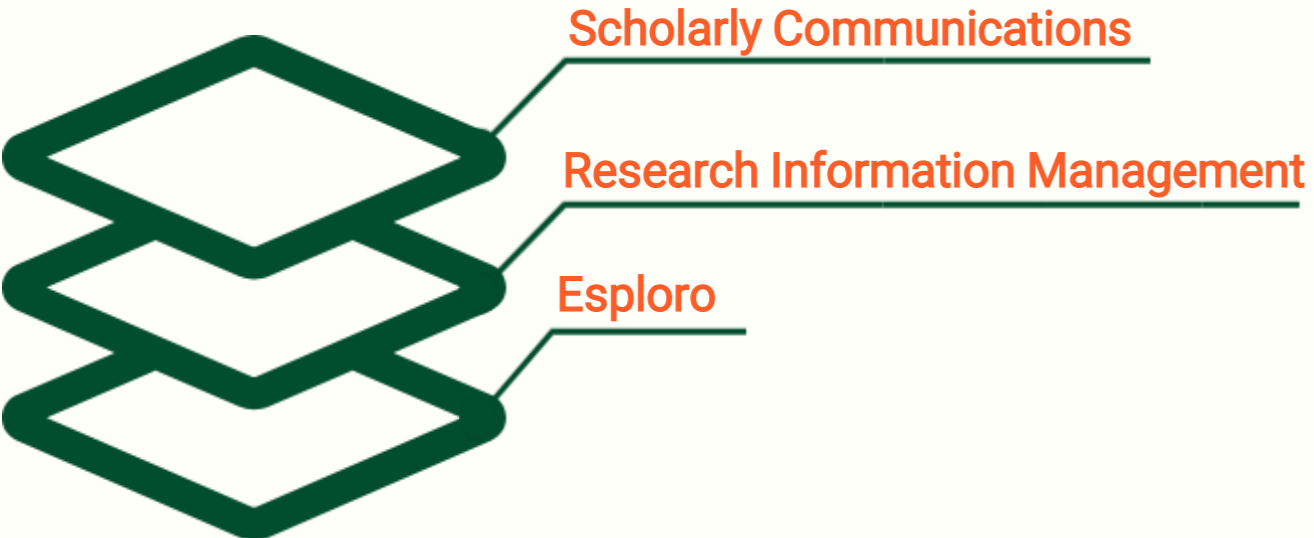


4

Campuses

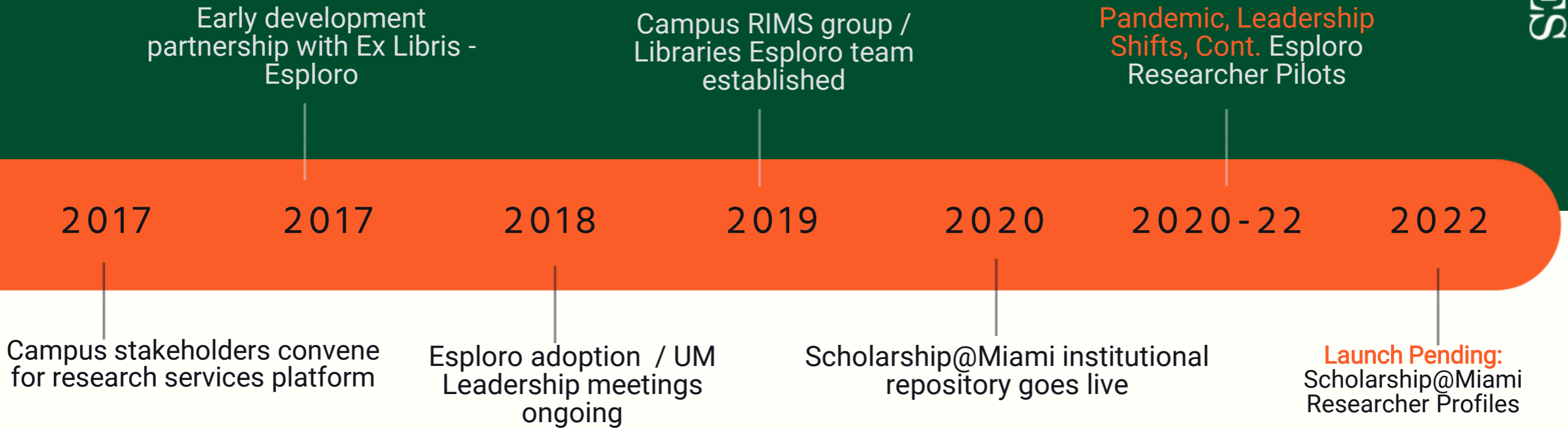
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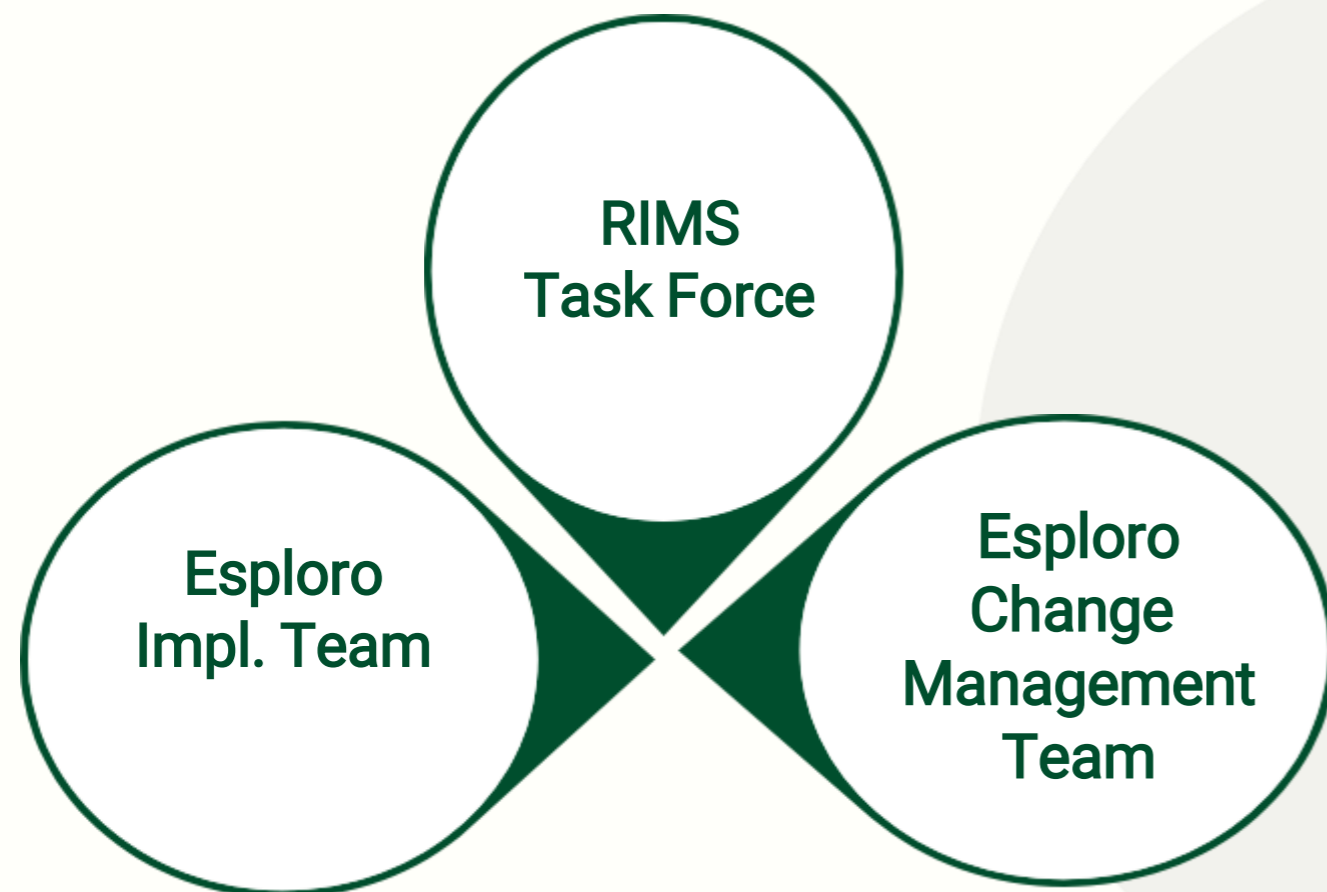
Schools & Colleges



UM Research Information Landscape | 2017-18

Scholarship@Miami Timeline (2017-2022)





Research Information Management Systems Task Force (2019-)

- Assess UM RIMS Environment
- Make recommendations about current needs & investments
- Create long-term RIMS strategy (systems, people, \$\$\$)

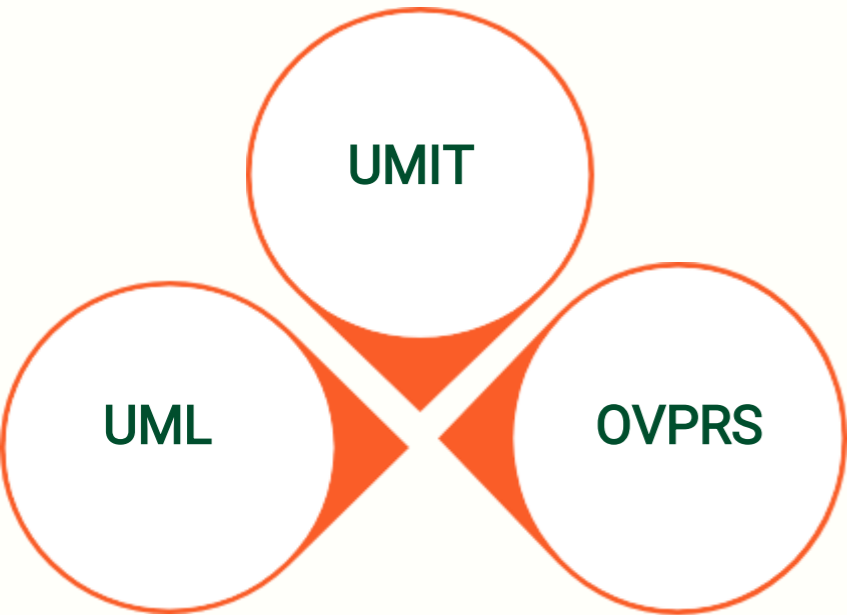
Esploro Implementation Working Group (2019-)

- Inform Esploro development
- Migrate from legacy system
- Launch Repository
- Populate & Launch Researcher Profiles (Utilizing AI)

Esploro Change Management Working Group (2021-)

- Prepare University for shift to single platform
- Pilots for Researcher Profiles

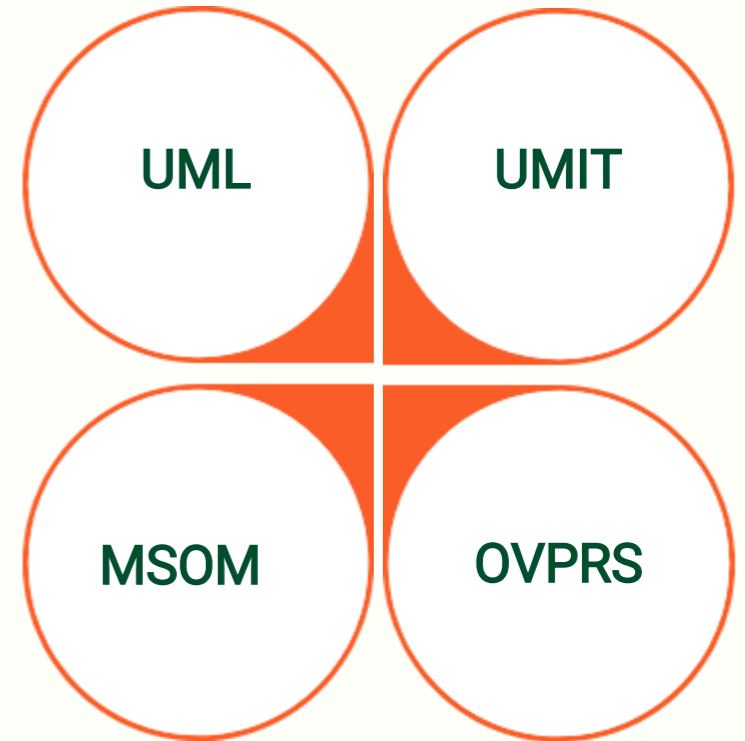
- 2019 New CIO
- 2020 New Vice Provost for Research & Scholarship
- 2022 New CIO



- 2022 Miller School of Medicine (MSOM) Faculty Directory



- Esploro / Faculty Directory
- Franken-Project



Strategic Relationships | Shifting Partnerships

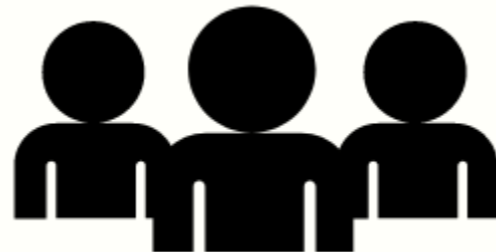
Leading from Behind — The Future is Bright

STEPS FOR RECOVERY

- Team airing of grievances
- Collectively, identify next step and wins
- Supportive dean who sees the future

CURRENT REALITY

- Library removed from front- line politics & pressure
- Research output = invaluable institutional asset
- Fulfilling unmet data needs
- Broadening expertise



Implementing Esploro at UM



MIGRATE FROM LEGACY SYSTEMS

bepress (institutional repository) & Elsevier Pure (RIMS/CRIS)



HR SYSTEM INTEGRATION

Streaming information about UM researchers from the University HR system



CITATION DATABASES & ANALYTICS

Utilizing Esploro Analytics, Ex Libris's CDI and APIs connections to multiple citation databases to identify UM researchers' outputs.



AUTHOR MATCHING ALGORITHM MECHANISMS

Leverage Esploro's Artificial intelligence and Machine Learning features to train the system to automatically capture and fetch relevant scholarly outputs produced by researchers affiliated with UM.

Esploro's Machine Learning Algorithm

HOW ESPLORO AI WORKS?

Esploro's Author Matching Algorithm learns how to match scholars to their research outputs by considering various identifying data points from the researcher's record and their previously known assets, against records covered in Ex Libris's CDI.

WHAT PROBLEM IS AI TRYING TO SOLVE?

Esploro's Author Matching Algorithm learns how to match scholars to their research outputs by considering various identifying data points from the researcher's record and their previously known assets, against records covered in Ex Libris's CDI.



WHAT AI ALGORITHMS CAN'T DO?

AI can't be self-taught from scratch. It requires humans in the loop and lots of trained data.



CITATION DATABASES

Microsoft Academic; The Lens; Scopus; Dimensions; Academic Analytics; Pivot; Web of Science; ORCID data

DATA TOOLS & ANALYTICS

Microsoft Power Bi & Power Query have been used to match between UM internal researcher ids and external ids recorded in the above citation databases

ESPLORO'S AUTHOR MATCHING AI FEATURES

- Smart Expansion via CDI
- Controlled smart harvesting
- Analytics reports and dashboards



Data Curation to train Esploro's AI

Pivot from Researcher Profiling to Metadata Reuse

Bryant, Rebecca, Jan Fransen, Pablo de Castro, Brenna Helmstutler, and David Scherer. 2021. *Research Information Management in the United States: Part 1—Findings and Recommendations*. Dublin, OH: OCLC Research. <https://doi.org/10.25333/8hgy-s428>



Source of Truth | accurate, trustworthy, and sufficiently complete



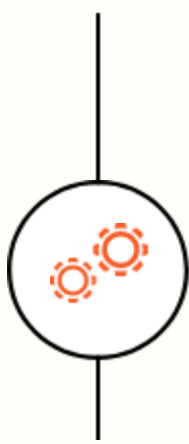
Data curation | well-curated, granular, usable



Integration | Accessible, sharable, and automated data flow



Functionality | support an array of business needs & satisfy diverse purposes



Functionality

Support an array of business needs & satisfy diverse purposes.

- **Scholarship@Miami's** (Esploro) **corpus of curated research data supports several university initiatives:** metadata on publications, managed by the Library, is integrated with several university discovery portals.
- **Solving challenges:** metadata on **grants** awarded by external funding agencies and linked to UM principal investigators are now collected via **Scholarship@Miami** and shared with several university discovery portals.
- **Customize reports** are shared regularly with external university entities. This includes productivity reports, publications analysis reports by discipline, research topics, or type of publication (example: Open Access Publications at UM).
- **Decision support via publications and grants analysis:** Internally, librarians have utilized and analyzed Scholarship@Miami's data to support decision-making related to transformative and open-access agreements offered by publishers.

From Implementation to Management



MIGRATE FROM
LEGACY SYSTEMS



HR SYSTEM
INTEGRATION



CITATION
DATABASES &
ANALYTICS



AUTHOR MATCHING
ALGORITHM
MECHANISMS



MAINTENANCE & WORKFLOWS

Manage day-to-day operations and development.

This includes:

- Ensuring data accuracy & completion,
- Approving "Smart Harvesting" tasks of new publications and grants and,
- Maintaining & expanding various data integrations to support external projects,
- Leading the Library RIMS Service Model vision

TRAINING THE TRAINERS

Expanding the network through a series of training the trainer events.



ESTABLISHING NEW WORKFLOWS

Consistently reviewing the harvested and expanded content for accuracy.

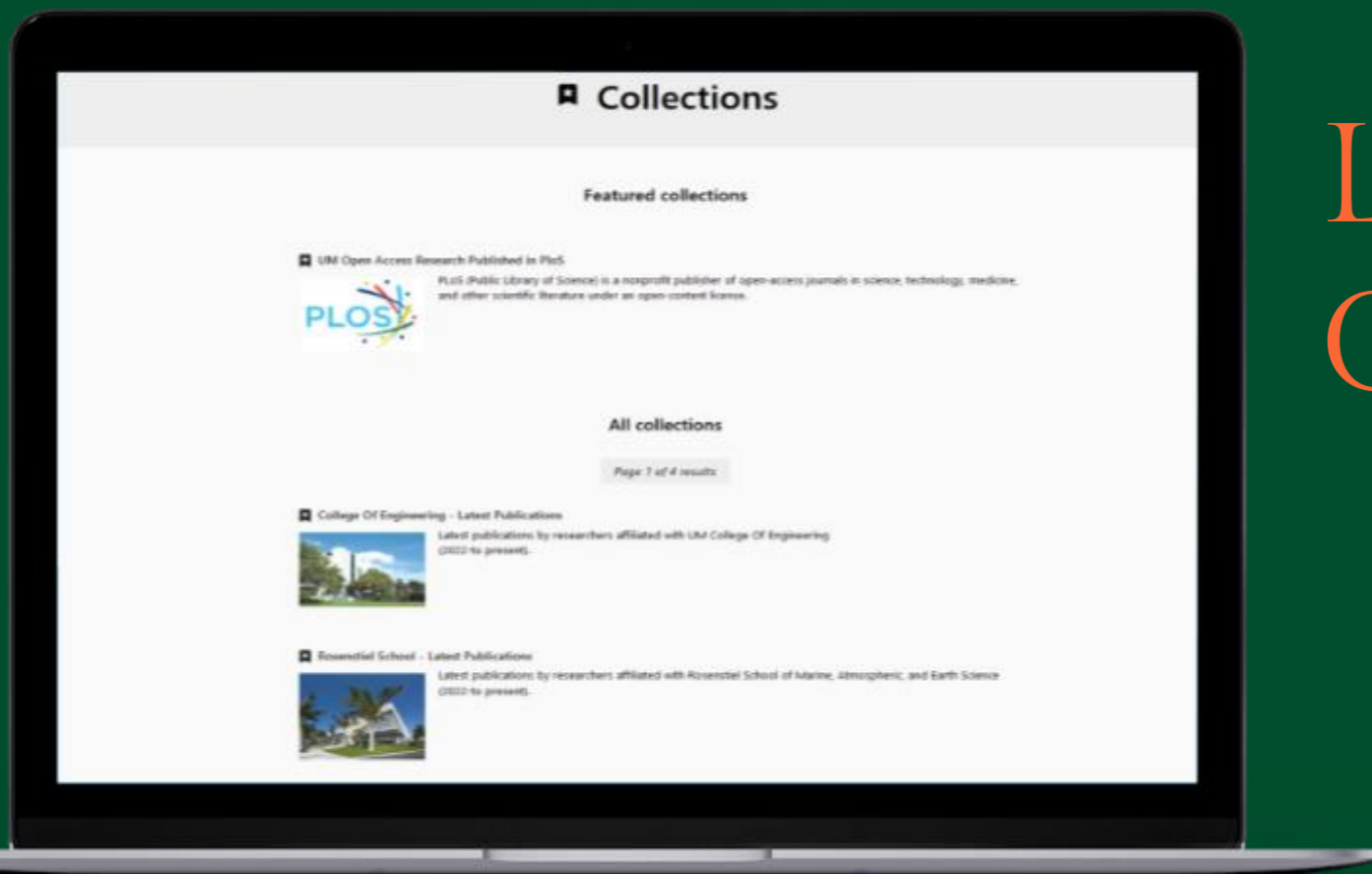


CONTINUED DEVELOPMENT

Exploring the impact of system changes on information seeking and sharing.



Live Research Collections





NEW DEPARTMENT



RESEARCH ANALYTICS
& IMPACT SERVICES



COMMUNICATION &
PARTNERSHIPS

The Future



Learn More!

Gushee, E., Clark Hughes, A., Ben-Knaan, K. (2023, May). *Leveraging Esploro to Advance Campus Initiatives at University of Miami*. [Conference session]. Ex Libris Users of North America (ELUNA) 2023 Annual Meeting, Los Angeles, California., **Forthcoming**, In-person.

Kautzman, A., Gushee, E., Clemons, J., Branch, S. (2022, March). *Research Information Management: Library Roles & Opportunities* [Video]. Association of College and Research Libraries (ACRL) [Choice webinar](#), 2022, Online.

<https://www.youtube.com/watch?v=AF8IEE0AiOo&t=107s>

Gushee, E., Clark Hughes, A., Ben-Knaan, K. (2021, December). *University of Miami's Esploro Journey: Leveraging Human Eco-systems & Intelligence to Train AI Models* [Conference session]. Coalition for Networked Information (CNI), Fall 2021, In-person. <https://www.cni.org/topics/scholarly-communication/university-of-miamis-esploro-journey-leveraging-human-eco-systems-intelligence-to-train-ai-models>

Bryant, Rebecca, Jan Fransen, Pablo de Castro. Brenna Helmstutler, and David Scherer. 2021. *Research Information Management in the United States: Part 2—Case Studies*. Dublin, OH: OCLC Research. <https://doi.org/10.25333/qv1f-9e57>.

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Questions?



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Thank you!