From Scratch to Launch

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

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University of Miami | Fast Facts

$375M FY21 Research Expenditures
3.4K Faculty, including 73 librarians
12K Undergrads
7K Graduates
4 Campuses
12 Schools & Colleges
UM Research Information Landscape | 2017-18

Source for Discovery
Source for Expertise
Source of Truth
Reduction of Tools
Scholarship@Miami Timeline (2017-2022)

- **2017**: Campustakeholders convenefor research services platform
- **2017**: Early development partnership with Ex Libris - Esploro
- **2018**: Esploro adoption / UM Leadership meetings ongoing
- **2019**: Campus RIMS group / Libraries Esploro team established
- **2020**: Scholarship@Miami institutional repository goes live
- **2020-22**: Pandemic, Leadership Shifts, Cont. Esploro Researcher Pilots
- **2022**: Launch Pending: Scholarship@Miami Researcher Profiles
Research Information Management Systems Task Force (2019-)
- Assess UM RIMS Environment
- Make recommendations about current needs & investments
- Create long-terms 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

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

**STEPS FOR RECOVERY**
- Team airing of grievances
- Collectively, identify next step and wins
- Supportive dean who sees the future
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.
Microsoft Power Bi & Power Query have been used to match between UM internal researcher IDs and external IDs recorded in the above citation databases.

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

DATA TOOLS & ANALYTICS

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

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
The Future

NEW DEPARTMENT
RESEARCH ANALYTICS & IMPACT SERVICES
COMMUNICATION & PARTNERSHIPS
Learn More!


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](https://www.youtube.com/watch?v=AF8IEE0AiOo&t=107s)


Questions?

Thank you!

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