

# Data and Funding Models to Support Research Excellence

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President Emeritus, Association of American Universities;  
Senior Advisor, Academic Analytics

**Caroline Whitacre**, Former Senior Vice President for Research, The Ohio State University; Senior Advisor, Academic Analytics

**Richard Wheeler**, Professor Emeritus of English and Emeritus Graduate Dean, University of Illinois Urbana-Champaign; Senior Advisor, Academic Analytics

**Note:** Attendees are muted upon entry.  
Please direct questions to the chat.

*While you wait...*

Insights from the Academic Analytics  
Research Center (AARC)

**nature**

Article | [Open Access](#) | [Published: 21 September 2022](#)

## Quantifying hierarchy and dynamics in US faculty hiring and retention

[K. Hunter Wapman](#) , [Sam Zhang](#), [Aaron Clauset](#) & [Daniel B. Larremore](#) 

[Nature](#) **610**, 120–127 (2022) | [Cite this article](#)

**96k** Accesses | **1360** Altmetric | [Metrics](#)

from coverage in *The Chronicle*:

“Just five universities have produced one-eighth of the tenure-track professors at American doctoral institutions, and 80 percent of such professors earned their Ph.D.s at just 20 percent of the nation’s universities.”



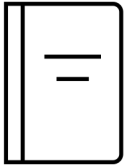
# Welcome and introduction

**Robert Berdahl, PhD**

Chancellor Emeritus, University of California, Berkeley;  
President Emeritus, Association of American Universities;  
Senior Advisor, Academic Analytics

# Your questions guide new development.

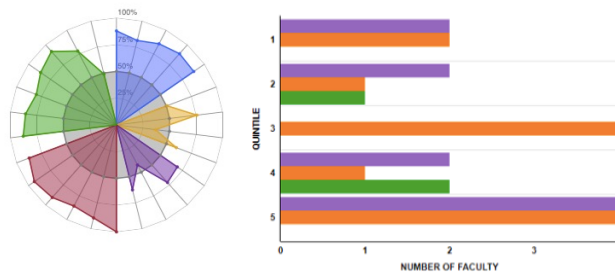
2005 – 2009



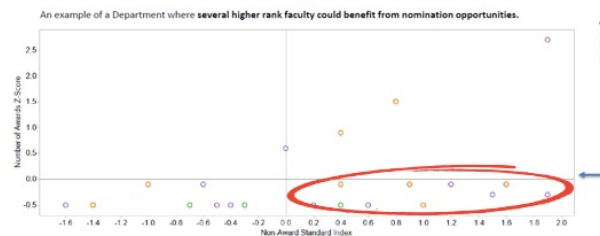
First annually updated inter-institutional comparisons of scholarly activity

2010 – 2015

Unit-level peer analyses and trends by academic rank

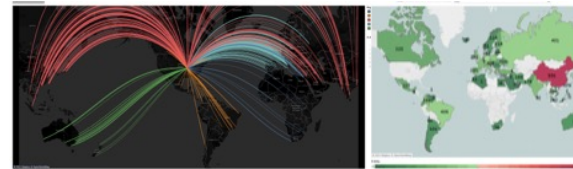


Tools for faculty equity and recognition

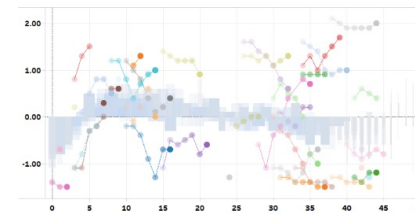


2016 – 2021

International collaborations and international funding



Longitudinal analyses



Collaborative networks and expertise search



2022

*In today's discussion you'll see:*

**Newest areas:**

1. Benchmarking for medical research enterprise
2. Streamlined faculty activity reporting
3. Analyzing alumni careers (bachelors, masters, doctoral and post-doc)

Records systems must work easily for faculty if they're going to fulfill their purpose for the university.

**Richard Wheeler, PhD**

Professor Emeritus of English and Emeritus Graduate Dean, University of Illinois Urbana-Champaign; Senior Academic Advisor, Academic Analytics


Records systems must work easily for faculty if they're going to fulfill their purpose for the university.


- Data on faculty productivity is crucial to the sort of imaginative and aggressive planning envisioned at KU and elsewhere.
- The strategic use of Academic Analytics' data for Benchmarking and Discovery can play key roles in shaping that planning and helping to move it into action.
- For administrative purposes, it is essential that the data consulted reliably represent the wide range of faculty scholarly activities, both in areas comprehensively covered by Academic Analytics and in other areas as well – notably, but not only, in the performing arts.


Records systems must work easily for faculty if they're going to fulfill their purpose for the university.


- Academic Analytics Faculty Insight...
  - ...incorporates its own data into the scholarly record of each faculty member, **requiring no data entry on the part of faculty for that data.**
  - ...enables faculty members to see the data for themselves collected by Academic Analytics.
  - ...enables faculty members to add items pertinent to representing their productivity that fall outside the data categories or time ranges of Academic Analytics, enabling administrators to view the **full range of their scholarly and service activities.**
  - ...provides materials about, for example, **honorific awards and funding prospects and possible collaborators**, that enable faculty to engage their own planning processes more effectively.


Activity Records


Presentation


Article


Grant


Creative Work


Book Chapter


Book


Patent


Award


Conference Proceeding

Other Publication

Clinical Trial

Classroom Educational Materials

Online Educational Materials

Software & Digital Media

Faculty Insight

Home

Search

My Profile

Activities

Documents

Reporting

Admin

Customization

Workflows

Activity Manager

Awards & Honors

Career

Scholarship & Creative Works

Book Chapters

Books

Classroom Educational Materials

Clinical Trials

Conference Proceedings

Creative Works

Grants & Funding for Research

Journal Articles

Online Educational Materials

Other Publications

Patents & Copyrights

Presentations

Reviews

Home / Activity Manager / Scholarship & Creative Works

Add information below to create record

Start Date\*

mm/dd/yyyy

End Date\*

No release date

Category\*

Type\*

Work Status

Work Review Status

Title\*

Manage your Records

Type

Title

The network graph visualization displays a complex web of connections between faculty members. The nodes, representing individual faculty, are arranged in a circular pattern. Lines of various colors (blue, green, red, orange) connect the nodes, indicating different types of relationships or collaborations. The names of the faculty members are listed around the perimeter of the graph, including: SCOTT W DESPOSATO, JASON S WENOT, ERIC LAMBIN, ANDREW TOWNSEND PETERSON, MAUREEN M DONAGHY, NATHAN P HENDRICKS, WAI-LUN CHAN, CHRISTIAN BRANNSTROM, MARCO CARICATO, STACEY SWEARINGEN WHITE, NATHANIEL A BRUNSELL, MARCELLUS M CALDAS, DAVID S BROWN, BELINDA STURM, STEVEN MAYNARD-MOODY, DIETRICH HARLAN EARNHART, MARK PURCELL, KEVIN CHARLES LEONARD, JUDITH HASTENS, NGONDI A KAMATUKA, FENGJUN LI, ERIC HANLEY, JUDY WU, JORGE SOBERON, CHRISTOPHER H RUDNICK, BRIAN B WARDLOW, KAREN OBERHAUSER, JOSEPH PAUL BREWER II, JOANE NASEL, DEBORAH ANN GIESSEN, ALICE BEAN, and DANIEL W. GIESSEN.

Records systems must work easily for faculty if they're going to fulfill their purpose for the university.

- Administrative tools of Ac/An have largely not been available to faculty, except, in many instances, as something to arouse their suspicion and distrust.
- Ac/An **Faculty Insights** program not only serves administrations eager for an effective faculty records system, but extends to faculty new levels of convenience and opportunity for recording and augmenting their scholarship.
- It has the potential to **minimize the labor involved in maintaining accurate personal records**, and enable faculty to augment their records with significant activities not collected by AcAn.
- And it enables faculty to look beyond their own record of achievement to **potential collaborations, research funding, and honorific awards**.

# **Benchmarking the medical research enterprise:** *From research expenditures to research excellence*

**Caroline Whitacre, PhD**

Former Senior Vice President for Research, The Ohio State University  
Senior Advisor, Academic Analytics

# Looking at the whole university

- What metrics have historically mattered most in medical schools?
- Research expenditures, NIH funding, RVUs, etc.
- This narrow view excludes dimensions of the medical research enterprise that most enhance the overall university
  - Rich interdisciplinary connections and new fields of inquiry
  - National and international recognition
  - High-impact clinical trials and community engagement

# Looking at the whole university

- Necessity of benchmarking data across the whole university
- Strategy to overcome geographic separation of medical center
- Historically, benchmarking in medical areas has relied on research expenditures and only certain sponsors; this must be broadened toward the full scope of “research excellence”
- Focus on interdisciplinarity: toward a “whole university” approach
  - Engineering -> real life medical examples and collaborators
  - Medical -> integrating humanistic and socially-informed approach to medical research; ethics-oriented collaborations; communications around community engagement (storytelling in the medical arena)

# When does this information matter most?

- Scenario #1: faculty retention
- Scenario #2: nominations for prestigious awards
- Scenario #3: faculty recruiting
- Scenario #4: strategic university-wide investment

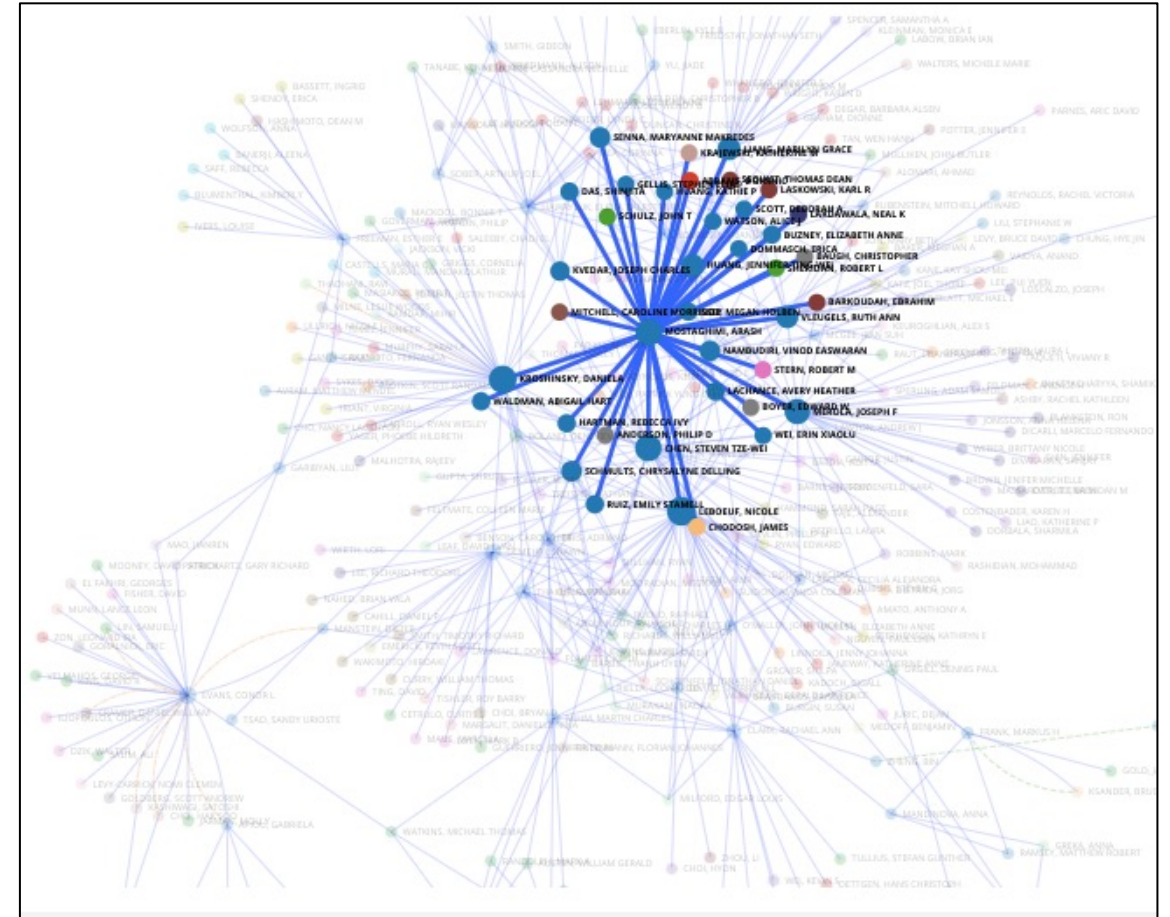
# Faculty retention

A faculty member in medicine comes to you with competitive offer from another university.

What would be impact of their departure?

What would be the savings of avoiding these scenarios with preemptive action?

How would this departure impact the unit's holistic research profile?



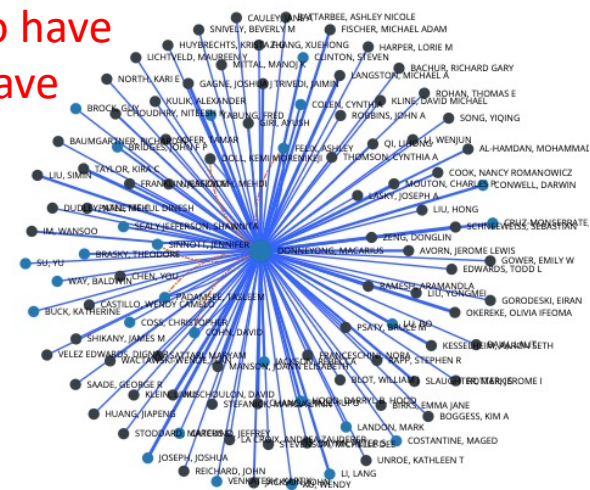
# Nominations for prestigious awards

- Prestigious awards like National Academy of Medicine and Clinical Research Achievement Awards require earlier career awards.
- Be able to identify relevant faculty-specific pathways of awards

## Identify best-fit awards for each individual

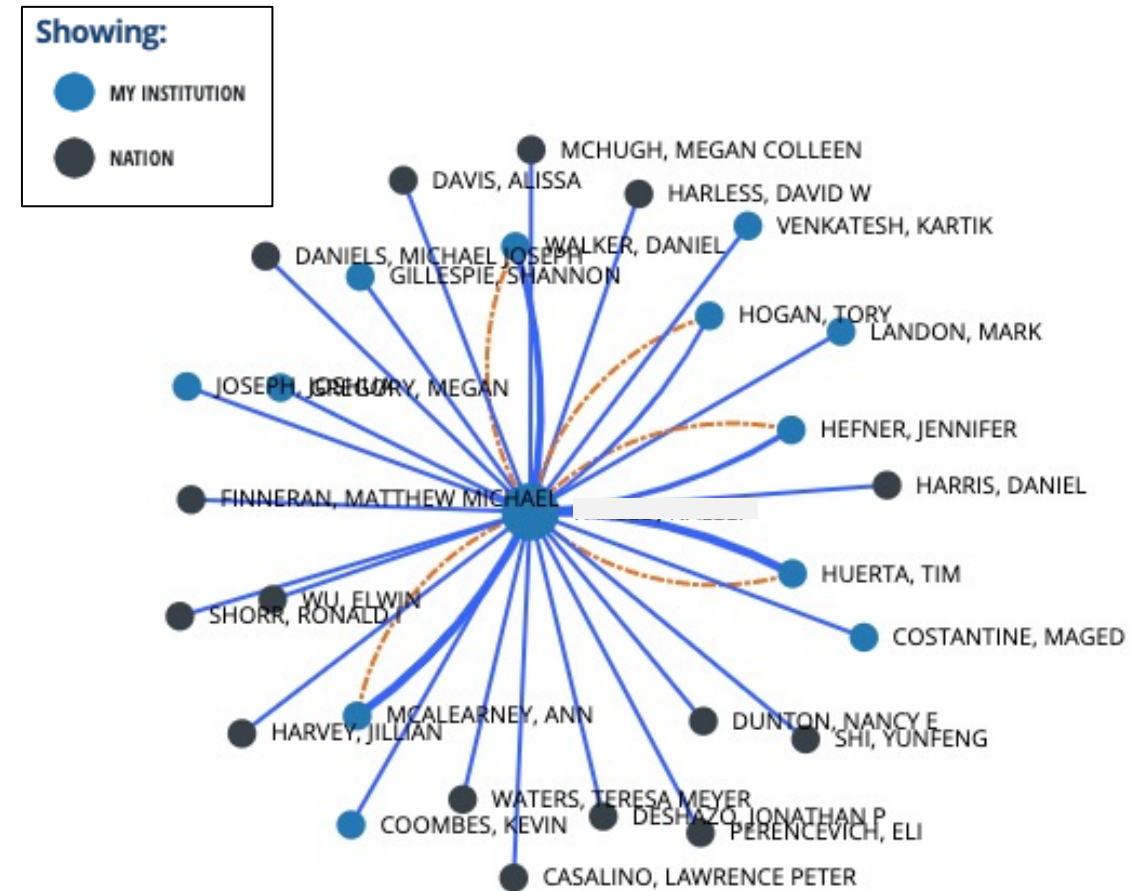
SI	AWARD NAME	GRANTING ORGANIZATION			
1.00	Fellow	Gerontological Society of America, The	6	0	3
0.88	AAAS Fellow	American Association for the Advancement of Science, The (AAAS)	132	6	3
0.88	NAM Member	National Academy of Medicine	5	1	3
0.88	NIH MERIT Award (R37)	National Institutes of Health (NIH)	6	1	1
0.85	Research Scholar Grant (RSG, RSGI)	American Cancer Society	21	3	2
0.80	Greenwall Faculty Scholars	Greenwall Foundation	1	1	0

Identify potential nominators who have received the award already and have collaborated with the candidate



# Faculty recruiting

- Many universities are engaged in **cluster hires** to enhance interdisciplinarity.
- In building clusters it is helpful to look at strategic additions to university faculty.

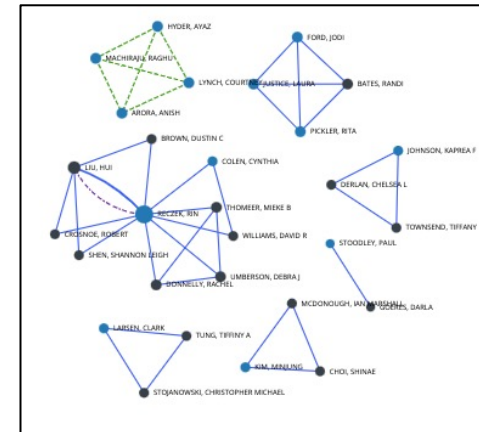


# Strategic university-wide investment

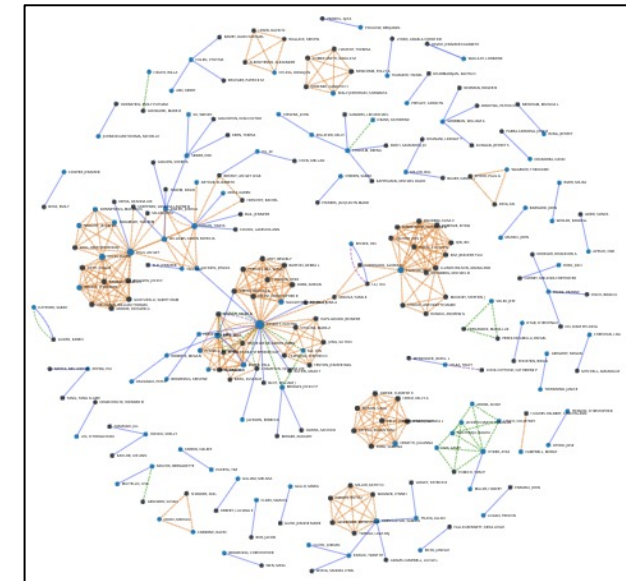
- Looking at the whole university, what are the areas of research strengths?
- Examples of an expanded view:
  - Climate impacts on health
  - Health disparities and inequity
  - Social determinants of vaccine distribution

## Research across campus on *health disparities*:

w/o medical faculty



-> including medical faculty



*Expanded view reveals that medical faculty are essential to the university's strength in this area*



# From *research expenditures* to *research excellence*

- A “whole university” approach to analyzing research data is...
  - Required to leverage the full interdisciplinary strength and potential of the institution
  - Politically necessary to engage a broad range of faculty and trainees
  - Able to benchmark centers and show their excellence and impact nationally
  - Move beyond a focus on just NIH funding
  - Important when considering:
    - Faculty retention
    - Prestigious awards for faculty
    - Faculty recruitment
    - Strategic university-wide investment

# **New data and funding models to support research excellence**

**Barbara Bichelmeyer, PhD**

Provost, Executive Vice Chancellor, and Chief Learning Officer  
University of Kansas

# ***Context***

Higher Ed Sector Transformation

+ Global Pandemic

+ Fiscal Challenges

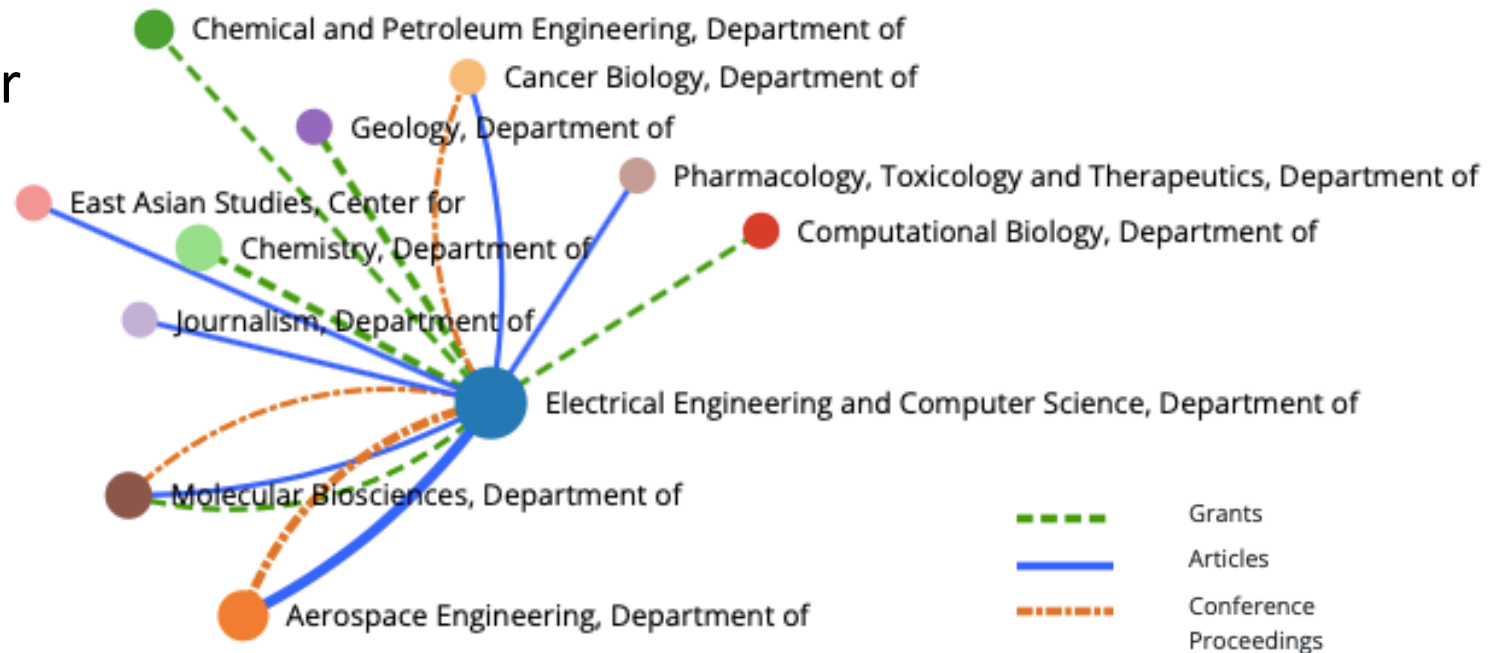
+ Historical & Incremental Funding Model

= Changes Needed

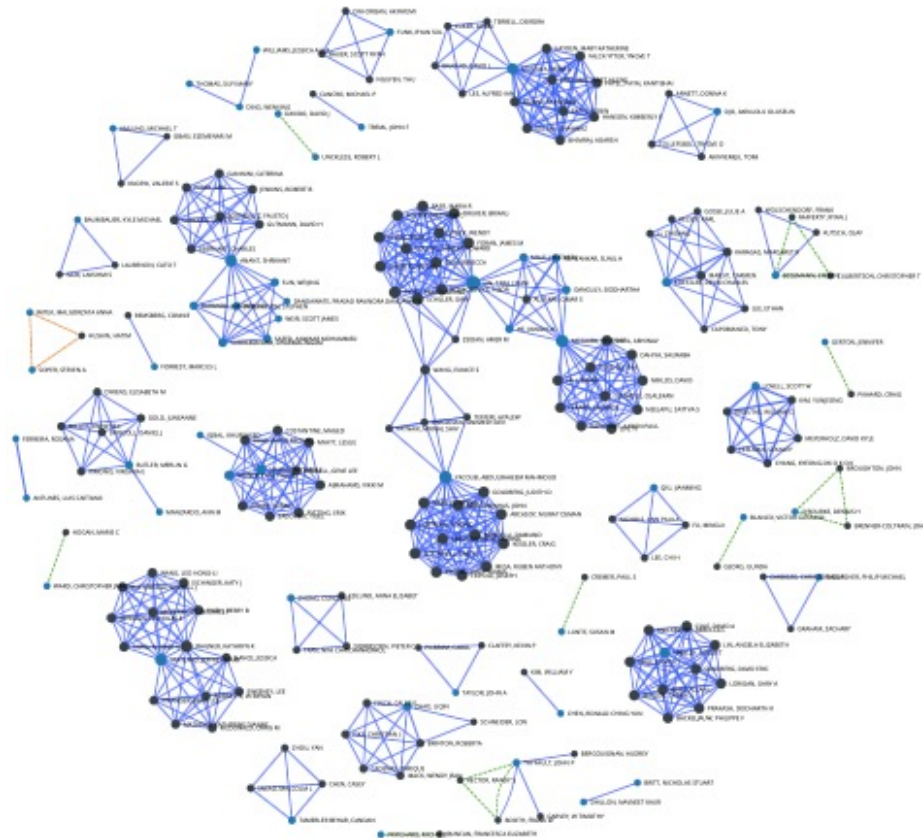
# BEGIN WITH DATA --

## Making invisible connections visible across many spheres

- Arts and sciences <-> medical center
- Liberal arts <-> prof. schools
- Prof. schools <-> medical center
- Across disciplines within A&S



# Moving away from “guild” model: Finding research strengths and interdisciplinary areas that transcend departments



## **Research Rising program**

\$18M in new funding

Interdisciplinary call to faculty

30 proposals

4 fully funded proposals

5+ new viable ideas with funding opportunities

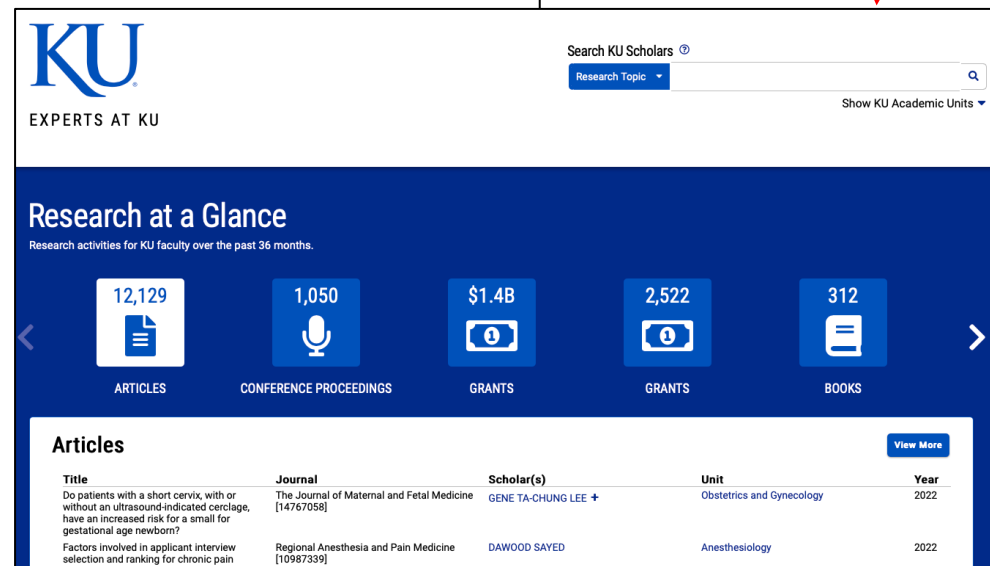
20+ new leads for further development

## **Priority areas for research investment:**

- Human development across the lifespan
- Earth, energy, and environment
- Being human in the digital age
- **Molecules and medicine**
- Safety and security



Using faculty activity data to communicate university's public story and advocate across Kansas





## NATABHONA MARIANNE MABACHI

ASSISTANT PROFESSOR

### Affiliations

Family Medicine and Community Health

[View Collaborations](#)

### Similar Scholars

SARAH FINOCCHARIO  
KESSLER

NIAMAN NAZIR

TRACY L WILLIAMS

TARA J NEIL

DONNA E SWEET

AMY L SEERY

KATHRYN ANGELA  
RHINE

PAUL B ROTERT

KATHRYN M. BIGELOW

MEREDITH ELISE

BAGWELL-GRAY

### Key Terms

hitsystem hiv pmtct poc eid

infant birth testing infants kenya

kenyan care providers women

community services mother weeks

sarts implementation health art

mothers diagnosis cervical

### Publications

Date	Work
2022	Article <b>Perceptions of Cervical Cancer Screening in</b> Journal: <i>Hispanic Health Care International</i> [1] DOI: <a href="https://doi.org/10.1177/1540415">https://doi.org/10.1177/1540415</a>

Abstract: [Show](#)  
Scholars: [NATABHONA](#)

2021	Article <b>"Friendly reminder: hi</b> Journal: <i>RMC Public</i>
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### Grants, Patents, Other Intellectual

Date	Work
2019	Grant <b>Evaluating the HITSys</b> Agency: <i>National</i> Total Amount: \$2,967, Duration: 12/18/

2018	Grant <b>MOCSA Contract</b> Agency: <i>Metro</i>
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### Media and Software/Digital Media

Date	Work
2020	Media <b>https://youtu.be/5I3K</b> Type: Other Description: <a href="https://youtu.be/5I3KgvFXNkc">https://youtu.be/5I3KgvFXNkc</a>

### Presentations

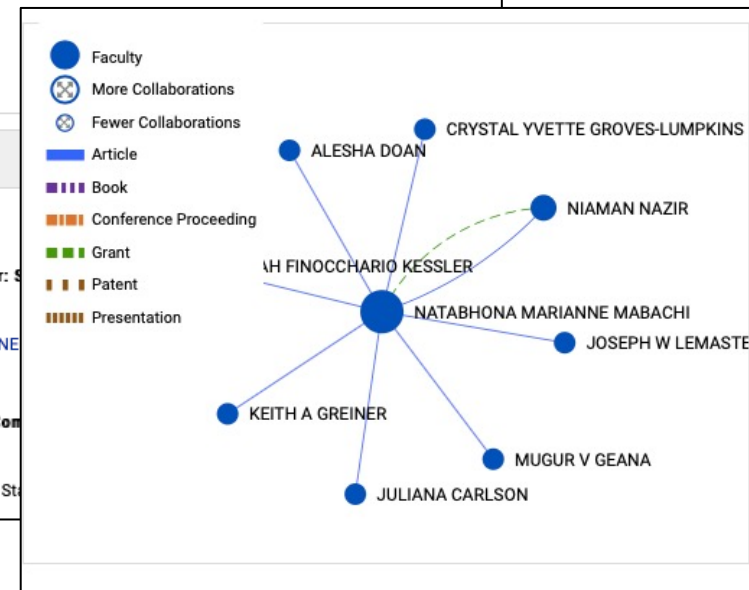
Date	Work
2020	Presentation <b>Incorporating structural competency and anti-racism practice into the Learning Community</b> Venue: <i>Learning Communities Institute Annual Meeting</i> Sponsor: <i>Learning Communities Institute (LCI)</i> Scholars: <a href="#">NATABHONA MARIANNE MABACHI</a>

### Membership

Date	Work
2020	Membership <b>MPH Ad Hoc Committee Member: S</b> Position: <i>Committee Member</i> Scholars: <a href="#">NATABHONA MARIANNE</a>
2020	Membership <b>KUMC SOM Curriculum Review Com</b> Position: <i>Committee Member</i> Location: <i>Kansas City, KS United Sta</i>

# Reducing administrative overhead for faculty

*Pre-populated  
faculty profiles  
reduce faculty  
burden and increase  
timeliness of data.*



*Focus on  
bringing  
visibility to  
areas of  
faculty  
contribution  
that are  
historically  
invisible.*

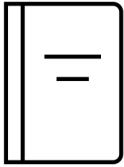
# Where and how do we invest?

- Rewards and recognition
- Improving salaries and wages
- Position control
- Better data for planning:  
Strategic alignment

# Where do we go next?

# Your questions guide new development.

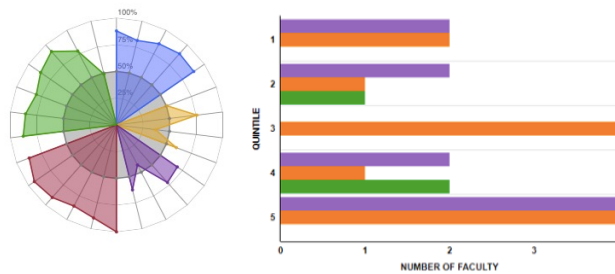
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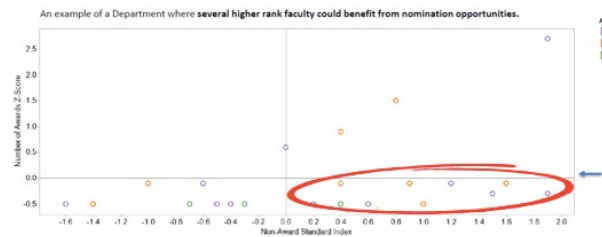
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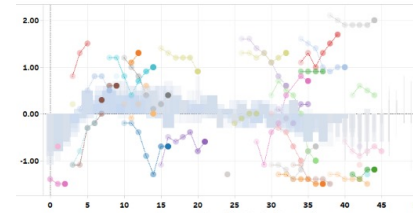


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