



Extension Programs, Altmetrics, and the Scholarship of Engagement

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Agenda

- Introductions
- Translational Scholarship: understanding pathways to broader impact
- Land Grant universities, extension agents, and knowledge exchange
- Boyer and the Scholarship of Engagement
- Developing altmetrics user personas for translational scholarship
- Case study: Scholarship at Virginia Tech's College of Agriculture and Life Sciences
- Emerging themes discovered
- Questions/Discussion

Sharing translational scholarship: *maximizing visibility and impact*



Who engages with this info?

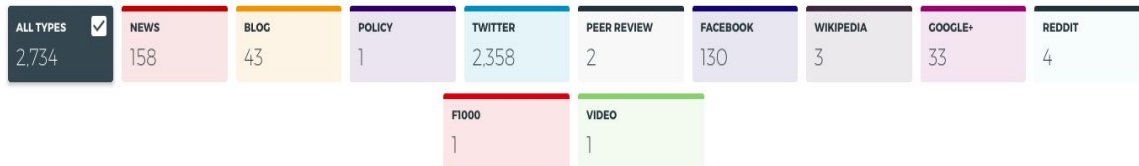
- Other scholars/researchers
- Communities of practice
- Policy-makers, funders, and gov't officials
- Nonprofits and community groups
- Industry professionals
- Commercial enterprises and corporations
- Educators and students
- Targeted communities and populations
- General public

What are the forums where this happening?

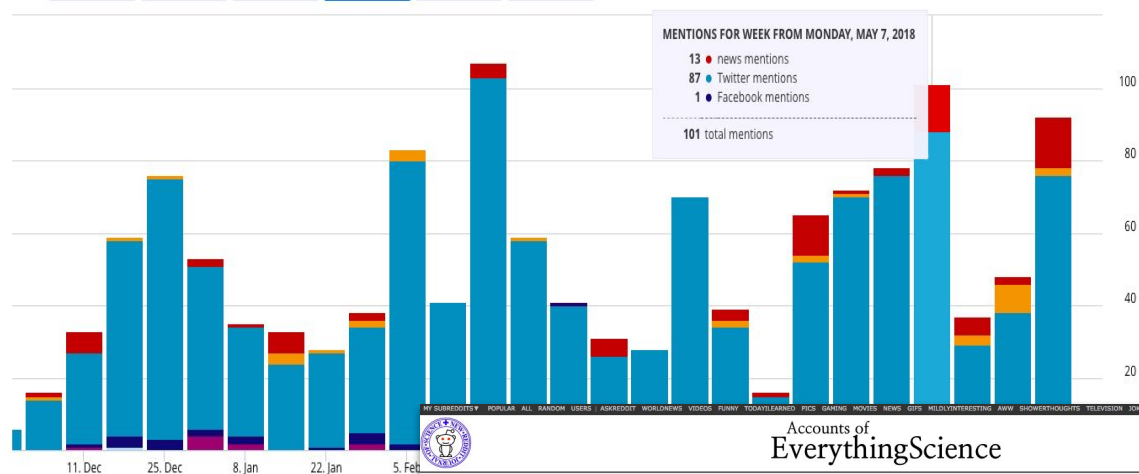
- Academic institutions and research centers
- Mainstream news and media
- Curated blogs and social media
- Policy documents and recommendations
- In-person outreach and learning events
- Patent applications/intellectual property
- Wikipedia and other crowd-sourced spaces
- Direct contact via email, newsletters, one-on-one interactions

Results analysis

Analyzing results for all research outputs sorted by Altmetric Attention Score with keywords containing food safety published after 2017-06-01



ZOOM 1 week 1 month 3 months 6 months 1 year All time



Accounts of EverythingScience

Get Flair in /r/Science and /r/EverythingScience

Medicine Study finds that schools are lacking adequate resources, namely sanitizer, to properly protect children from foodborne pathogens
submitted 2 months ago by PHealthy MPH | Global Health | Infectious Disease
1 comment share save hide report

all 1 comments
 sorted by: best

Want to add to the discussion?
 Post a comment
[CREATE AN ACCOUNT](#)

[+] PHealthy MPH | Global Health | Infectious Disease | S | 1 point 2 months ago

Abstract
 This study evaluated microbial contamination and good manufacturing practices (GMP) in school kitchens. Thus, the kitchen of four municipal schools have been assessed through microbiological analysis performed in their cutting boards (n = 12), kitchen sinks (n = 12), dish cloths (n = 12), hands of food handlers (n = 22), kitchen sponges (n = 12), milk (n = 10), and water (n = 10). A questionnaire was also applied to food handlers in order to access their profiles and get to know their daily practices inside school kitchens. The results this study showed that all samples (surfaces, cutting boards, kitchen sponges, milk, and water) were contaminated with heterotrophic bacteria. *Staphylococcus aureus* was found on the surface of sinks, dish cloths, cutting boards, and on the hands of food handlers. Fecal coliforms were found on sinks, water, and milk. Results from the survey reveal that food handlers know about GMP, but they do not perform these activities in school kitchens.
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theopandoras
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Is MSG healthy? I delve into my take on the MSG debate. I hope you find it helpful
*Some medical literature on MSG:
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F1000Prime

ARTICLE RECOMMENDATIONS | RANKINGS | F1000PRIME REPORTS | F1000 FACULTY | BLOG

F1000Prime - Article Recommendations

2 Poultry hatcheries as potential reservoirs for antimicrobial-resistant *Escherichia coli*: A risk to public health and food safety.

Osman KM, Koppel AD, Ehadidi M, El-Mosagy F, El-Qhany WAA, Orabi A, Mubarak AS, Dawoud TM, Fleming KM, Mousa MM, Hassan AM, Yousof HWY
show author affiliations

Sci Rep. 2018 Apr 11; 8(1):15859

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INTERESTING ARTICLE! GET MORE LIKE IT SMARTSEARCH

RECOMMENDATIONS 1 | ABSTRACT | COMMENTS expand all

Very Good 18 Apr 2018

PH Niyaz Ahmad
 F1000 Microbiology
 International Centre For Diarrhoeal Disease Research, Dhaka, 1212 (BD), Bangladesh.

AFM Muhammad Asaduzzaman
 F1000 Microbiology
 International Centre For Diarrhoeal Disease Research, Dhaka, Bangladesh.

INTERESTING HYPOTHESIS | NEW FINDING


DOI: 10.34104/f1000.1959.733544910

We consider this article's finding as a new threat for food safety and new insight into the development of antimicrobial resistance (AMR) in the food chain. Poultry hatcheries are thought to maintain strict biosecurity, and no or very little published information is available for the presence of resistant *E. coli* and genes in the hatchling samples. In the current study, 7 out of 10 sampled Egyptian hatcheries in various locations were found to be burdened with resistant organisms both in the hatchling neocoriums and hatchery environment. A total of 63.3% of the hatchling isolates were found to be multiple drug resistant (MDR), whereas 36.7% were extensively drug resistant (XDR). β -lactam resistance gene profiling was also important and depicted blaTEM as the most common one along with blaOXA-1, blaFOX like blaGDT-like, blaSHV and blaFOX. However, the phenotypic and genotypic analysis of obtained serotypes from hatchlings and the hatchery environments suggest a large variation in producing beta-lactams, susceptibility patterns and gene expression. This is a clear indication of the potential and distinct role of poultry hatcheries to act as a major reservoir of drug resistant *E. coli* and other pathogens, which has a widespread impact on the spread of AMR in the whole poultry value chain.

Disclosures

Food and feed law:
 Compendium of UK food and feed legislation with associated context and changes during October – December 2017

Government Chemist Programme Report



Extension agents and knowledge exchange:

*Land grant colleges and
the New Scholarship*

"...extension will collaborate with partners, on campus and off—to align systems (including recruitment, professional development, accountability, and undoing systems) to support engaged work that cuts across the spectrum of teaching, research, and service."

-- Fear, F., & L. (2016). The "New" Scholarship: Implications for Engagement and Extension



United States Department of Agriculture National Institute of Food and Agriculture

NIFA LAND-GRANT COLLEGES AND UNIVERSITIES

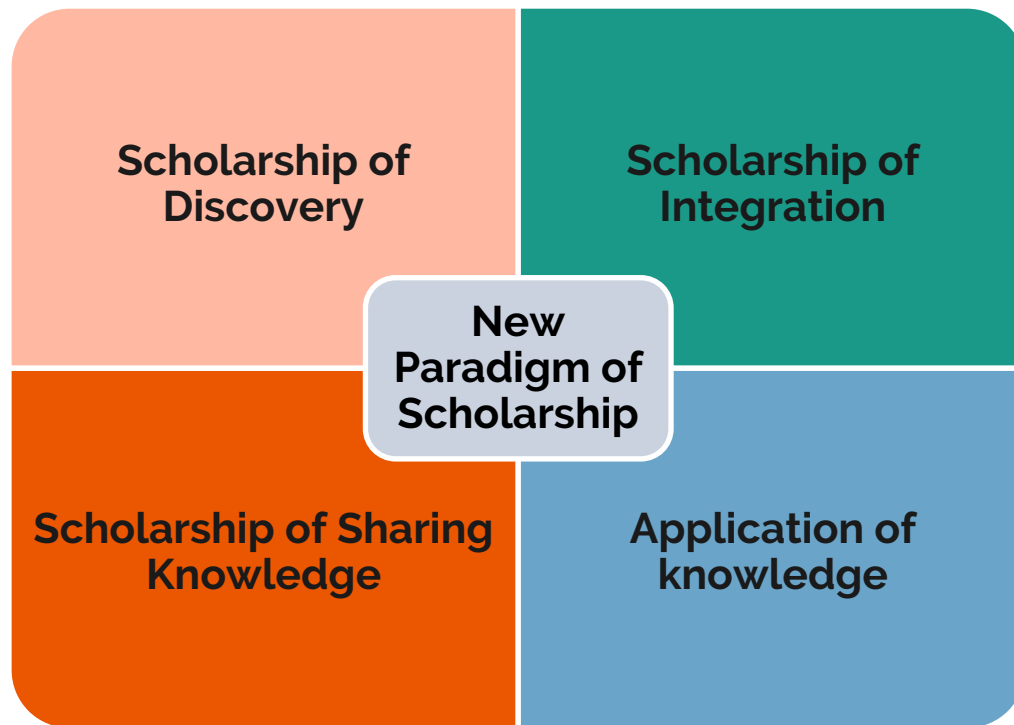


Land Grants
Research
Stations,
and
Cooperative
Extension

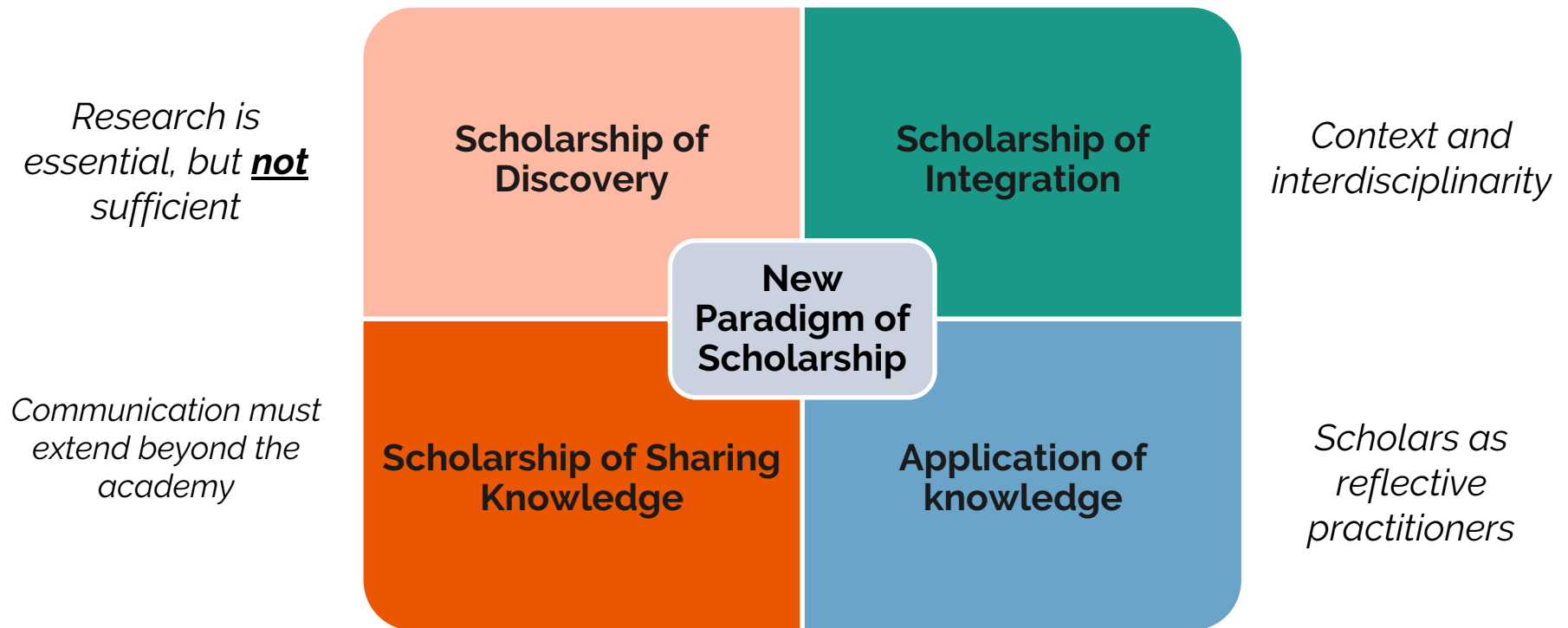
Scholarship of Engagement

—

Boyer's model: four interlocking components to scholarship



Boyer's model: four interlocking components to scholarship





Developing altmetrics user personas

What are user personas?



What are they?

- Hypothetical “user” profiles meant to improve functionality and quality of service
- Originally emerged out of tech development/web design and user experience work
- Involves rigorous qualitative and quantitative data collection and analysis
- Proposed for library site/space design in 2003 by Alison J. Head

What do they do?

- Develops understanding of workflow and behavioral patterns
- Identifies key technical skills unique to each persona
- Determines universal features and functionality
- Evokes empathy; audits and eradicates stereotypes
- Iterative and collaborative -- two way exchange between researchers and communities



User personas for altmetrics

- What primary data is available?
- Secondary?
- What are our assumptions around user categories?
- What attributes align with each?
- What are each user-types' potential frustrations?
Motivations?

CALS altmetrics user personas: *reflexive collaboration*

Goals:

1. Approach process with a critical lens, keeping mission and values at center
2. Meet needs of CALS program workflows and behavioral patterns
3. Develop in the context of engagement scholarship/non-traditional research outputs
4. Identify and align with communication methods associated with each user
5. Treat personas as living, iterative documents
6. Ensure personas are openly available, shared broadly, and repurposable

Process:

1. Identification of research and workflow needs
2. Brainstorm process and goals to meet needs
3. Established research project plan
4. Conducted literature review
5. IRB Approval
6. Initial qualitative survey
7. In-depth, semi-structured, recorded interviews representing four unique scholarly perspectives
8. Organize and analyze data from interviews
9. Collect and analyze additional primary and secondary data
10. Create and share reusable persona frameworks
11. Publish findings
12. Use personas/research for broader impact evaluation across departments, organization, etc.

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Initial Proto-Personas

	AREC	Extension Agent	Research	Teaching
Attributes / outputs	Field days	Extension pubs	Protocols	Open syllabi
Frustrations	Internet	Need for real-time data	Mediating policies and processes	Large class sizes; costs
Motivations	Support producers	Improve communication efficiency	Obtain and sustain funding	Connect science to practice
Goals	Diffuse risk	Relay time-sensitive, accurate info	Knowledge discovery and innovation	Inspire practical intellectualism

Primary data collection: *Questions to guide qualitative inquiry*



1. Please describe % appointments at VT across research, teaching, and outreach.
2. How do you define impact with respect to your research/work?
3. Can you describe your professional role/relationship with non-academic communities?
4. How do you distribute/share information with these communities?
5. What other pathways/forums do you use to share research information and communicate with different audiences? Online or otherwise?
6. How do you share information about your impact? What successes have you had in this realm? What are the challenges to this?
7. Are there individuals or organizations in your field that you feel do this particularly well? Please provide examples.
8. What, if any trends or shifts in scholarly communication and impact evaluation have you perceived?
9. If you had a magic wand, what would it do or solve with respect to your work and impact?



Emerging Themes

“Scholarship is not an it.”

- Fear, F., & L. (2016)

- **Narrative-driven metrics and storytelling**
 - *Crafting an **impactful** impact statements*
 - *Making scholarship personal and relatable*
- **Outreach = key**
 - *Engagement with numerous, diverse communities*
 - *Connecting awareness to behavior/social change*
- **Challenges to current incentive systems and review structures**
 - *Tenure & promotion still focused on citations, journal impact factor, etc.*
 - *No defined frameworks for analyzing altmetrics*
- **Time limitations and resource constraints**
 - *Strategic social and digital media outreach is labor intensive*
 - *Incentives often don't align broader engagement activities*



Questions? Comments?

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Alternative frameworks?



Alternative frameworks?



*A Scholarship of
Engagement must keep
values and mindfulness
at the center.*

Habermas's Three Forms of Knowledge

1. Instrumental knowledge
(technical rationality)
2. **Communicative knowledge**
3. **Emancipatory knowledge**



The Scholarship of Engagement today

“Scholarship is not an it.”

- Fear, F., & L. (2016)

- Current framework in academia is at odds with engaged scholarship
- Prevailing methodology is that of **technical rationality**, i.e., “scientific approach,” systematic applied procedures
- Scholarship is not static nor a planning process
- New paradigm must challenge traditional construct
- Engaged scholarship must embrace critique and be a dialogue amongst all stakeholders
- Align with the norms of engagement
- Engagement **with whom** and **to what end?**

Alternative frameworks?



- ★ Facilitator versus expert model
- ★ Reflective practice
- ★ Qualitative and participatory processes
- ★ Expressive forms of scholarship (eg, storytelling)
- ★ Service learning - curricular and faculty function
- ★ Scholarship **IN** engagement
- ★ Engagement in teaching, research, and service
- ★ Engaged forms of inquiry, discovery, and change:
- ★ Participatory and action research