Roles of Librarians in Furthering the Institution’s Research Agenda

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SEAFDEC Aquaculture Dept. Library
Learning Objectives

The aims of this lecture are:

1. to give an overview on various roles of librarians in the research cycle;
2. to present the realities and challenges faced by research librarians in furthering these new roles; and
3. to suggest innovations in library services and collections to encourage research among stakeholders.
Part I:

Librarians' Roles in the Research Life Cycle
Research Life Cycle
(Kwon, 2017; Vaughan et al., 2013; JISC, 2013; White, 2018)

1. Idea Development
   - are developed through structured activities
     - conducting literature searches, finding relevant resources, doing background reading, and attending presentations
   - serendipity
     - by browsing journals, viewing displays, having conversations with colleagues, or surfing the web
2. Funding and Partners

- locating funding sources
- making research team or finding researchers with similar interests by using formal and informal networks
  - potential research partners from academic disciplines, institutions, and organizations
Research Life Cycle
(Kwon, 2017; Vaughan et al., 2013; JISC, 2013; White, 2018)

3. Proposal writing
   - presenting and justifying the need to study the research problem
   - presenting the ways how the proposed study should be conducted
Research Life Cycle
(Kwon, 2017; Vaughan et al., 2013; JISC, 2013; White, 2018)

4. Research Process / Conducting

- varies across disciplines
- researchers simulate, experiment and observe
- researchers manage, analyze and share data
Research Life Cycle

(Kwon, 2017; Vaughan et al., 2013; JISC, 2013; White, 2018)

5. Publishing/Disseminating
- scholarly journals
- repositories
- theses
- research reports
Librarians’ Role in Research Life Cycle

- Idea Development
- Publication
- Research Process
- Funding
- Proposal Writing
Librarians’ Role

1. **Idea development** (Vaughan et al., 2013)
   - finding background literature
     - library catalogs
     - union catalogs, ex. WorldCat, COPAC, AMICUS, and LibraryLink (for Filipiniana collections)
     - bibliographic databases, ex. Web of Science (WOS), Scopus, IEEE Xplore Digital library, Ebsco, ProQuest, etc.
     - institutional repositories
     - Google Scholar
   - utilizing research tools effectively
   - locating data sources
Librarians’ Role

- finding background literature
- utilizing research tools effectively
  - feasibility tests involve reviewing related literatures and executing mini-experiments
  - lab members also check the accessibility of lab equipment by consulting literature, company Websites or their catalogues, and consulting colleagues in and out of their lab, including online communities
- locating data sources
Librarians’ Role

- finding background literature
- utilizing research tools effectively
- locating data sources
  - statistical data
    - FAOStat- nutrition, food, and agriculture related statistics of Food and Agriculture Organization of the United Nations member states
    - Philippine Statistics Authority (PSA)- population, health, education, agriculture, trade, poverty, etc. data of the Philippines
  - research data
    - data repositories- contains datasets of researches that were isolated for future use
      - deposition is usually a part of part of the manuscript submission process
      - multidisciplinary, ex. Dryad, FigShare, Pangea, etc.
      - subject specific, ex. GenBank, GitHub, PubChem, etc.
    - visit Registry of Research Data Repositories (https://www.re3data.org/) to search for subject specific data repositories
2. **Funding**

- **identify specific grant opportunities**
  - Department of Science and Technology (DOST)
  - National Research Council of the Philippines (NRCP) [http://nrcp.dost.gov.ph/research-grants](http://nrcp.dost.gov.ph/research-grants)
  - Governmental, Educational, and International Policies, Mathematical Sciences, Medical Sciences, Pharmaceutical Sciences, Biological Sciences, Agriculture and Forestry, Engineering and Industrial Research, Social Sciences, Physics, Chemical Sciences, Humanities, Earth and Space Science, and Veterinary Medicine
  - types of research on Philippine cultural practices and artistic expressions are supported by the NCCA

- **find alternative funding sources**
  - academic institutions; local and international organizations
Librarians’ Role

- things to consider when communicating grant opportunities to your faculty/researchers
  - deadline for submission
  - institute’s research thrust
  - field of expertise
  - prepare a list of current researches in the field to guide your researchers
    - bibliographic databases
    - Google Scholar
    - patent libraries (ex. IPOPhil Patent Search, Espacenet, WIPO, USPTO)
    - communicate with your institute’s Patent Office or Innovation and Technology Support Office (ITSO)
Librarians’ Role

3. Proposal Writing

- access to project proposal forms
- research proposal writing tips
  - institutes research proposal guidelines
  - libguides (ex. USC Libraries [https://libguides.usc.edu/writingguide/researchproposal](https://libguides.usc.edu/writingguide/researchproposal))
- provide researchers access to related literature
4. Research Process

- provide researchers access to protocols and standards
  - ex. Official Methods of Analysis of AOAC International (Chemistry), APHA Standards Methods (water and wastewater), Codex Alimentarius (foods, food production and food safety) ISO Standards, etc.

- provide researchers access to statistical software
  - ex. SPSS, R, StatLab, etc.

- research data management

- manage citations (access to reference management software, ex. Endnote, Mendeley, Refworks, Zotero, etc.)
  - Google Scholar
Mass mortality of *Penaeus monodon* larvae due to antibiotic-resistant *Vibrio harveyi* infection

I Karunasagar, R Pai, GR Malathi, I Karunasagar - Aquaculture, 1994 - Elsevier

The cause of mass mortality in *Penaeus monodon* larvae may be due to antibiotic-resistant *Vibrio harveyi* which was absent in healthy eggs and nauplii. The disease could be prevented by using antibiotics like penicillin or ampicillin.
Librarians’ Role

5. Disseminating

- Select journals
- What is a journal?
  - in librarianship, a newspaper or periodical particularly a periodical issued by a society or institution and containing news, proceedings, transactions and reports of work carried out in a particular field (Prytherch, 2005)
  - in scientific community, scientific journals represent the most vital means for disseminating research findings and are usually specialized for different academic disciplines or subdisciplines (APA, 2019)
What is the role of the scholarly scientific or professional journal?

serve as both a filter and a curator for both sides of the market (Abbot, 2017):

- to deliver novel, relevant, quality-assured articles to the reader; and
- to bring a large, specific, relevant audience of readers to the author
Librarians’ Role

- Tips in selecting journals for your researchers (Abbot, 2017):
  - consider its audience
  - consider its reputation
  - consider its timeliness in accepting papers for publication
Librarians’ Role

Tips in selecting journals for your researchers (Abbot, 2017):

- Consider its audience
  - Most relevant audience for the work
  - If the result is intended for the general public, choose Open Access journal
  - Look at where it is indexed (subject-specific indexes, ex.: PubMed, ASFA, etc.)

- Consider its reputation

- Consider its timeliness in accepting papers for publication
Librarians’ Role

- Tips in selecting journals for your researchers (Abbot, 2017):
  - consider its audience
  - **consider its reputation**
    - an endorsement of a national association or learned society
    - an editorial board consisting of well known and respected people within the discipline
    - high-quality publisher
  - Age
  - Metrics
  - indexing/abstracting coverage
  - consider its timeliness in accepting papers for publication
Librarians’ Role

- **What about metrics?**
  - used to measure journal impact or ranking
  - based on the number of citations articles receive, signifying a journal's importance and influence
    - Journal Impact Factor (JIF or IF)
      - average number of times an article, from a journal published in the last 2 years, has been cited in the JCR year
      - from Journal Citation Reports (JCR), an Incites database from Clarivate Analytics, formerly Thomson Reuters and ISI
    - other metrics include CiteScore, SNIP (Source Normalized Impact per Paper), SCImago Journal Rank (SJR), Eigenfactor Score (EF)
    - Altmetrics- are alternative approaches to measuring the impact of a scholarly work, as demonstrated by users' interest in and engagement with it
      - track mentions of a work in social media outlets such as Twitter, blog posts, and research networking sites, plus use in newspapers or government policy documents
Librarians’ Role

- **Indexing/abstracting coverage**
  - Directory of Open Access Journals (DOAJ)
  - ProQuest
  - PubMed Central (PMC)
  - Scopus
  - ERIC (Education Resources Information Center)
  - Web of Science
    - Science Citation Index
    - Science Citation Index Expanded
    - Current Contents
    - Zoological Record
    - BIOSIS Previews
    - Emerging Sources Citation Index, etc.
Librarians’ Role

- **Indexing/abstracting (A&I) coverage**
  - How to determine?
    - Visit the journal homepage and look for A&I webpage

![Image showing the journal homepage with a highlighted section for abstracting/indexing](image-url)
Librarians’ Role

- Indexing/abstracting (A&I) coverage
  - How to determine?
  - Visit A&I website
    - Scopus: https://www.scopus.com/sources
Librarians’ Role

- Web of Science (Clarivate Analytics): [http://mjl.clarivate.com/](http://mjl.clarivate.com/)
Librarians’ Role

• Directory of Open Access Journals (DOAJ): [https://doaj.org/](https://doaj.org/)
Librarians’ Role

- Beware of Predatory Publishers (Beall, 2012)
  - publish counterfeit journals to exploit the open-access model in which the author pays
  - are dishonest and lack transparency
  - aim to dupe researchers, especially those inexperienced in scholarly communication
  - set up websites that closely resemble those of legitimate online publishers, and publish journals of questionable and downright low quality
  - some predatory publishers spam researchers, soliciting manuscripts but failing to mention the required author fee. Later, after the paper is accepted and published, the authors are invoiced for the fees
Librarians’ Role

Beware of Predatory Publishers

Published by: The American Association for Science and Technology (AASCIT)

Dear Superior, DL

It is learnt that you have published an article with the title of *The Specialist* in JOURNAL OF LIBRARY ADMINISTRATION and the topic is quite interesting. So we intend to invite you to submit other precious papers of related fields to the journal. As long as the paper meets the general criteria of significance and academic excellence, the journal welcomes it.

[Website Link]

Register as Members and Enjoy “members-only” Services

Invitation Letter

American Journal of Computation, Communication and Control

American Association for Science and Technology (AASCIT)

**BEALL'S LIST OF PREDATORY JOURNALS AND PUBLISHERS**

- American Association for Science and Technology (AASCIT)
- American Journal
- American Research Institute for Policy Development
- American Research Journals

Sam Kagawa
May 5, 2016 at 8:00 am

AASCIT are complete spammers beware. Recently I sent an article to the American journal of science and technology. After what appears to be a bogus review they replied that they have accepted my article. They asked me to pay article processing charges. The bank transfer address is Hongkong while the journal is American! I transferred 6 USD 2016 after acknowledging the receipt of the money they refused to publish my article. I pleaded with them but since then they refused to reply. The address aascit002@gmail.com; there is no person full name, no address, no contact. Only email address. These are complete spammers. Do not ever send your journal to AASCIT. I have all the evidence of the communication I had with them. If needs be I can give you the details.
Beall’s List of Predatory Journals and Publishers

https://beallslist.weebly.com/

- This is a list of questionable, scholarly open-access publishers.

- According to Spears (2017), “Since 2012, this list has been world’s main source of information on journals that publish conspiracy theories and incompetent research, making them appear real.”

- Developed by Jeffrey Beall, a librarian from the University of Colorado.

- He had taken down his blog because of pressure from the University of Colorado, which threatened his job security (Beall, 2017).
Librarians’ Role

- Tips in selecting journals for your researchers (Abbot, 2017):
  - consider its audience
  - consider its reputation
  - **consider its timeliness in accepting papers for publication**
    - the acceptance and rejection rates of journals are a strong indicator of status and quality standards
    - a low acceptance rate (that is, a high rejection rate) indicates a highly selective journal that selects articles carefully on the basis of fit to its aims, scope, and audience, as well as on quality, rigor, novelty, and likely impact
    - a high acceptance rate sends a very strong negative quality signal, best avoided
    - acceptance rates are often reported by the journal on the author information pages of its website.
Librarians’ Role

5. Disseminating

- Identify Open Access journals
  - open access (OA)- unrestricted online access to articles published in scholarly journals (Laakso et al., 2011)
  - Gold OA or Green OA?
    - Gold OA
      - publishers make the journal article freely available on the Internet
      - some publishers charge article processing charges (APCs)
    - Green OA
      - publishers allow researchers to deposit or self-archive publications (usually preprints and post prints) in institutional repositories
    - Hybrid OA
      - publishers offer a combination of subscription access and open access
      - researchers may be approached by a hybrid publisher to pay a fee for open and immediate access
Journal’s OA Policies

- **Gold OA**

**Open Access**

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Journal’s OA Policies

- Hybrid OA
- Green OA

**Gold open access**
- Articles are freely available to both subscribers and the wider public with permitted reuse.
- A gold open access publication fee is payable by authors or on their behalf, e.g. by their research funder or institution.

Regardless of how you choose to publish your article, the journal will apply the same peer review criteria and acceptance standards.

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Journal’s Archiving Policies

- Sherpa/Romeo [http://sherpa.ac.uk/romeo/index.php](http://sherpa.ac.uk/romeo/index.php)
  - is an online resource that aggregates and analyses publisher open access policies from around the world and provides summaries of self-archiving permissions and conditions of rights given to authors on a journal-by-journal basis

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<tr>
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<tr>
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One journal found when searched for: Southern Philippines Medical Center Journal of Health Care Services

- Author's Pre-print: ✓ author can archive pre-print (ie pre-refereeing)
- Author's Post-print: ✓ author can archive post-print (ie final draft post-refereeing)
- Publisher's Version/PDF: ✓ author can archive publisher's version/PDF

General Conditions:
- Publisher's version/PDF may be used
- Authors retain copyright of journal article
- On open access repository

Mandated OA: (Awaiting information)

Published by: Southern Philippines Medical Center - Green Policies in RoMEO
Librarians’ Role

5. Disseminating

■ Manage Copyright

Copyright “is a form of intellectual property that grants the creator of an original creative work an exclusive legal right to determine whether and under what conditions this original work may be copied and used by others, usually for a limited term of years” (Wikipedia, 2019)

■ Creative Commons Licenses

Copyright licenses that enable the free distribution of an otherwise copyrighted "work"
  ■ a CC license is used when an author wants to give other people the right to share, use, and build upon a work that he or she (that author) has created
# Creative Commons Licenses

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Librarians’ Role

5. Disseminating

- Track Research Impact
- Citation-Based Metrics
  - Crossref
  - Google Scholar
  - Scopus
  - Web of Science
- Altmetrics
- Journal Metrics
Track Research Impact

- Create Researcher Profiles
  - ORCID iD (Open Researcher and Contributor ID)
  - Researcher ID (Thomson Reuters)
  - Author ID (Scopus)
  - My Citations (Google Scholar)
  - ResearchGate
  - Academia
Create Researcher Profiles

**ORCID**

- ORCID researcher profile, a researcher is assigned a Unique Author Identifier used to distinguish your work from other researchers with similar names.
- register here: [https://orcid.org/register](https://orcid.org/register)

**Researcher ID (Thomson Reuters)**

**Author ID (Scopus)**

**My Citations (Google Scholar)**
Track Research Impact

Create Researcher Profiles

- ORCID
- Researcher ID (Thomson Reuters)
  - a researcher profile and author identifier integrated into Thomson Reuters products (i.e. Web of Science; InCites; EndNote)
  - the ResearcherID author identifier makes it easy to calculate all kinds of citation-based metrics and demonstrate the impact your researcher’s research is having on the world
  - register here: http://www.researcherid.com/#rid-for-researchers
- Author ID (Scopus)
- My Citations (Google Scholar)
Track Research Impact

- Create Researcher Profiles
  - ORCID
  - Researcher ID (Thomson Reuters)
  - Author ID (Scopus)
    - Scopus automatically assigns an ID to a researcher to bring the researcher's publications together
    - If the researcher has publications in Scopus, he/she will have a Scopus author profile/ID
  - My Citations (Google Scholar)
Create Researcher Profiles

- ORCID
- Researcher ID (Thomson Reuters)
- Author ID (Scopus)
- My Citations (Google Scholar)

- a researcher profile tool integrated into Google Scholar
- when a researcher creates an account, Google will automatically search for publications it believes written by the researcher and ask him/her to verify these citations as his/her own
- citations can be added manually for any publications that Google may have missed.
- as the researcher continues to publish, his/her My Citations profile will update automatically, always asking you to verify the citations it finds before adding them to your profile
- to set up My Citations a Google Gmail account
Track Research Impact

- ResearchGate
- Academia
- Mendeley
Part II:

Realities and Challenges Faced by Research Librarians in Furthering these New Roles
Challenges Affecting Libraries and Librarians

Glusker & Exner, 2018

Data Services
- Raw or partially-aggregated data

Skills Development
- Instruction
- Digitization
- Metadata Creation
- Scholarly communications
- Data management

The Changing Library Environment
- Physical to Virtual

Unawareness
Researchers’ lack of awareness of the library resources and services, and librarians’ abilities

Management Support
- FUNDING

Developing Collaborations
- Librarians as bridge among multiple disciplines
Developing Present Roles
Nitecki & Davis, 2017

Assessment
- Understanding Researchers’ Work
- Identifying Needs

Curation
- Designing Infrastructures and Implementation of Digitization Projects
- Cataloging and Preserving

Education
- Advocacy and Raising Awareness
- Skills Training

Environment Designer
- Creating Environments for Lifelong Learners and Citizen Scientists
- Renovating Places and Spaces
Part III:

Library Services to Support Research among Stakeholders
Research Support Services
Fernandez-Marcial, Costa, & Gonzalez-Solar, 2016

- Research Support Link
- Selective Dissemination of Information (SDI)
- Advanced Reference Services
- Research Support Training
- Self-Training Guides
- Scientific Writing Support
- Repository Management
- Open Access Support
- Information Evaluation
- Intellectual Property Support
- Special Document Support
- Research Data Support
- Embedded Librarian
- Bibliographic/Content Management
- Research Metrics
- Social Network Profiles
- Researcher Identification
- Institutional Cooperation
The SEAFDEC/AQD Library Services

- Automated Library System
  - online
  - 24/7 service
  - integrated library services
- Relevant book and periodical collection
  - need-based acquisition
Philippine Agricultural Scientist, Vol. 101, no. 4, 2018. ***

Plankton and Benthos Research, Vol. 13, no. 3, 2018. Table of Contents


Science, Vol. 360, no. 6395, 2018. Table of Contents ***

Science, Vol. 360, no. 6396, 2018. Table of Contents ***

Sherkin Comment, Issue No. 65, 2018.

Transactions of the American Fisheries Society, Vol. 147, no. 5, 2018. Table of Contents ***

Journal Indexing Coverage:
* - Indexed in Current Contents ABES
** - Indexed in Current Contents ABES, SCI-Expanded
*** - Indexed in Current Contents ABES, SCI-Expanded, SCI
**** - Indexed SCI-Expanded
Proactive Reference Services
  - Current Awareness Services
  - Selective Information Dissemination
  - Document Request
  - Bibliographic Services
Dear All,

Below is a bibliographic list of our current journal articles and book chapters acquisition, classified according to SEAFDEC R&D thematic areas. Most of the articles were taken from Q3-indexed journals and are all available for circulation. Link to publisher’s abstract is provided in every article for your easy reference.

Regards and God bless,

SEAFDEC/ AQD

TOPIC ALERT

- a bibliographic list fisheries- and aquaculture-related publications
- book chapters, journal articles, magazine articles, online resources
- subscription-based or Open Access
- selected by library staff
- classified according to SEAFDEC Thematic Areas – RESEARCH THRUST

Meeting Socio-Economic Challenges of Aquaculture


Meeting Socio-economic Challenges of Aquaculture


**Fish Health**
TOPIC ALERT

• Contains download link for downloadable articles


ARTICLES OF THE DAY

• recently published fisheries- and aquaculture-related articles
• at least two articles in a day

A Social-Ecological System Framework for Marine Aquaculture Research

Teresa R. Johnson ... et al.

Abstract:

Aquaculture has been responsible for an impressive growth in the global supply of seafood. As of 2016, more than half of all global seafood production comes from aquaculture. To meet future global seafood demands, there is need and opportunity to expand marine aquaculture production in ways that are both socially and ecologically sustainable. This requires integrating biophysical, social, and engineering sciences. Such interdisciplinary research is difficult due to the complexity and multi-
ARTICLES OF THE DAY

• requested articles were sent as email attachments

  with a disclaimer:
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Salay, Nerissa

Yes

Lebata, Junemie

to me

Thanks thanks. As usual your speed is like that of a bullet train when responding to requests. Keep it up.

Best regards,

Junemie

Thais

many thanks. very efficient.


Thank you!