

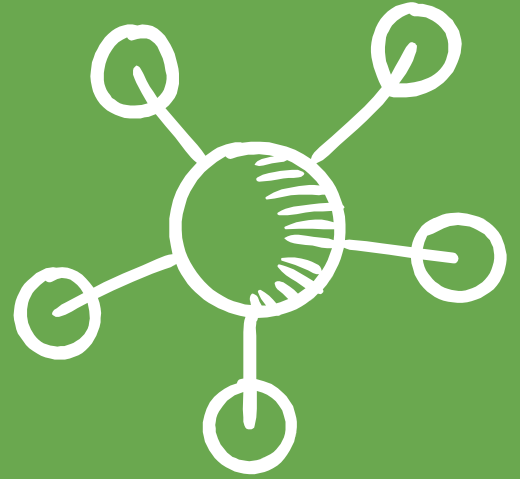
# Understanding Researcher Needs and Raising the Profile of Library Research Support



Colin Nickels & Hilary Davis  
NC State University Libraries

# Context of our Study

- Libraries' Fellows Initiative: *Raising the Profile of the NC State University Libraries Research Support Strategies and Engagement*
- Researchers expect little to no learning curve
- Position our resources at point of need
- Pilot new outreach strategies



# Strategic Alignment

- “Strategic alignment of resources to advance the capacity of our researchers and partners”
- Librarians and Staff hungry for answer to “what do researchers need?”



# Internal and External Participants

- **Internal:**

- Capture Scope of Research Support
- Create Buy-In
- Find Library Assumptions

- **External:**

- Discover Unmet Needs
- Investigate Outreach Methods
- Test Library Assumptions



# Methods

- Semi-structured qualitative interviews
- Data saturation with 12-20 interviews
- 22 researchers
- 24 groups of librarians
- But...each interview revealed new perspective



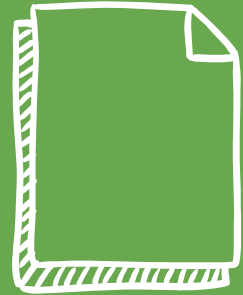
# Researcher Interviews - Demographics

Career Stage	Number of Participants
Student	2
Early Career (1-5 years)	4
Mid Career (6-15 years)	9
Late Career (16+ years)	7

# Findings

# “What kinds of information do you rely on?”

- **Most popular:** Journal articles, books, government data, conference proc, colleagues
- **Data:** Twitter, remote sensors, GIS, industrial, census, imagery
- **Web:** Wayback Machine, blogs, Google Scholar, listservs
- **Technical:** Code, open source software, software & equipment manuals, GitHub
- **Library:** Dissertations, A&I databases, lit reviews, ref works, spec coll, digital newspapers
- **Other:** Citizen groups, courses, text corpora, news, grants





# “How do you locate this information?”

- **Google Scholar!**
- **Student researchers** - Web-based strategies
- **Early and Mid-Career researchers**
  - Physical visit to the library
  - Personal networks
  - Twitter
  - Serendipitous discovery
- **Late Career researchers**
  - Journal alerts
  - Librarians
  - Twitter
  - Personal networks



# “How do you look for help from others on campus?”

- **Peer networks**
- **Student researchers:** mentors, workshops
- **Early, Mid- and Late career researchers:** disciplinary communities, campus units, website
- **Library-specific help**
  - access to collections and resources
  - service points
  - consultations
  - course-integrated pedagogy and instruction
  - workshops
  - events
  - spaces



# Challenges in Seeking Help

- **Challenges**

- Communication gap
- Finding experts and collaborators
- Networking events

- **Recommendations**

- Create a stronger network of support
- Aggregate of campus-wide services
- Involve researchers in event development



# “What kinds of data do you produce or use?”

- **Findings**

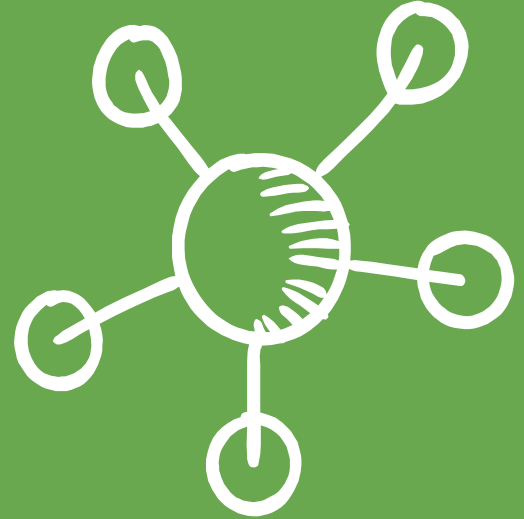
- Small → Large data
- Images, numerical, transcripts, physical data
- Generated locally and using external data

- **Challenges**

- Storage!
- Data analysis
- Data quality

- **Recommendations**

- Outreach for storage options
- Support for using new tools, methods
- Data consultancy



# “What kinds of skills do you need?”

- **Specific Skills**

- R, Python, AI, IoT, GIS, Crimson Hexagon
- All stages of career

- **Skills for Students**

- Context of field
- How to read an article
- Editing
- Communication
- Core research



# “What kinds of skills do you need?”

- **Soft Skills**

- Interpersonal skills
- Management skills
- Reproducibility
- Leadership

- **Technology Changing**

- New skills every year
- Project dictates skill to acquire



# “How do you collaborate?”

- **Findings**

- On and Off Campus
- Complementary skill sets
- Easier to get funding if collaborating
- Dedicated space (physical & virtual)

- **Challenges**

- Technology
- Logistics
- "job is to hunt people down, schedule them, add in buffer time, facilitate communication so that everyone knows what is going on"



# “How do you typically share or publish your work?”

- **Challenges**

- Incentive structure → Traditional pubs
- Disciplinary reputation → Non-traditional pubs
- Open access limitations
- Scaffolded publishing

- **Recommendations**

- Examples & support for scaffolded publishing
- Infrastructure for non-trad pubs + metrics
- Pathways to open access
- Build confidence in open research practices





# Overarching Challenges

- **Time**

*"People want to do stuff with you, but many opportunities are missed because of lack of time"*

- **Promotion and Credit**

*"I have a 50% contribution to one article."*

- **Aggregation and Relevance**

*"Some kind of an information and communication gap... some information is not written anywhere and some information is spread across many different places."*



# Overarching Challenges

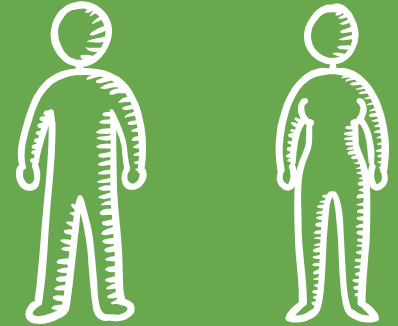
- “Make myself more confident and have a way to have older scholars have more faith” (Student Researcher)
- "Having library spaces has been a lifesaver - being able to come in and hide from students" (Early Career)
- "Time, eat, sleep, doing things with my family" (Mid Career)
- "Ways to engineer projects to fit reality of people I work with - really have to know the limitations of the people I work with" (Late Career)



# Librarians vs. Researchers on Services

- **Researcher Support and Services**
  - Collections
  - Consultations
  - Search Strategies
  - Scholarly Communication Support
  - Data Management Plans
  - Data Visualization Support
  - Technology Lending

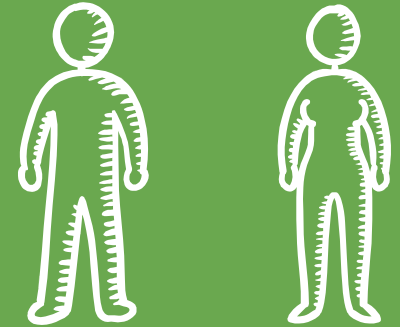
**All of the above**



# Librarians vs. Researchers on Services Outreach

- **Targets for More Outreach**

- |                          |       |
|--------------------------|-------|
| ○ Intellectual Property  | No    |
| ○ Tech lending           | Yes   |
| ○ High-Tech Spaces       | Mixed |
| ○ Digital Media          | Yes   |
| ○ Data and Visualization | Yes   |

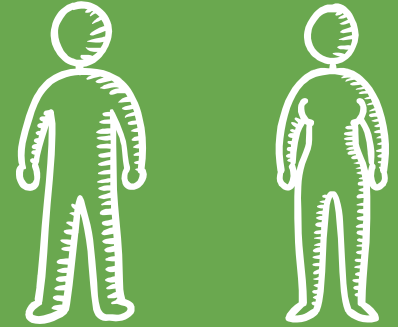


# Librarians vs. Researchers on Outreach Methods

- **Outreach Strategies**

- Email
- External Dept Meetings & Events
- Building & Sustaining Relationships
- Workshops
- Library Programs
- Course-Based Instruction

**All of the above**



# Next Steps

- Interview Guide for Liaisons
- Research tracks - test and iterate
- Sharing with Stakeholders
- Continuing to Improve Discovery
  - Partnership between User Experience and Acquisitions and Discovery
  - Linked-Data Approach



# Questions & Thanks!

**Slides:** [go.ncsu.edu/ncserials-researcher-needs](https://go.ncsu.edu/ncserials-researcher-needs)

**OSF.io:** <https://osf.io/akd2v/>

**Medium:** [medium.com/raising-the-profile](https://medium.com/raising-the-profile)

**Follow-up with us anytime:**

- Colin Nickels ([crnickel@ncsu.edu](mailto:crnickel@ncsu.edu))
- Hilary Davis ([hmdavis4@ncsu.edu](mailto:hmdavis4@ncsu.edu))

