Research Resources at UCF
Research In Medical Education Lunch & Learn Series
Meet your panel of experts...

- **Shalu Gillum, JD, MLS, AHIP**
  Head of Public services, Harriet F. Ginsburg Health Sciences Library

- **Natasha Williams, MLIS**
  User Services Librarian, Harriet F. Ginsburg Health Sciences Library

- **Anya Andrews, PhD, PMP**
  Associate Professor of Medicine and Director of Research Initiatives

- **Elise Dantuma, MBA, MS**
  Assistant Director of Research Programs

- **Julia Soulakova, Ph.D.**
  Biostatistician, Associate Professor of Medicine

- **Angie Griffin**
  Faculty Development Coordinator
LITERATURE REVIEW

Shalu Gillum, JD, MLS, AHIP
Head of Public services

Natasha Williams, MLIS
User Services Librarian
HELP US HELP YOU…

5 THINGS WE NEED TO KNOW BEFORE WE START A LITERATURE SEARCH
5 THINGS WE NEED TO KNOW FROM YOU

1. What are some keywords?
2. How far back in the literature do you want to search?
3. What is your expectation for turnaround time?
4. How would you like the information delivered?
5. Are you expecting us to find anything??
SHOW ME THE MONEY: Grant Opportunities for Medical Education and Beyond

Office of the Associate Dean for Research (ADR) Team

“Research in Medical Education Lunch & Learn Series” in collaboration with “ADR “Faculty Collaboration and Engagement Series (FACES)”
The ADR Team

- **Sampath Parthasarathy, Ph.D., MBA**, Associate Dean for Research, Professor of Medicine, Florida Hospital Chair in Cardiovascular Sciences
- **Anya Andrews, Ph.D., PMP**, Director of Research Initiatives, Associate Professor of Medicine
- **Elise Dantuma, MBA**, Assistant Director of Research Programs
- **Julia Soulakova, Ph.D.**, Biostatistician, Associate Professor of Medicine
- **Jennifer Van Deuren**, Coordinator
Our Capabilities

• Identify relevant funding opportunities (**All**)
• Facilitate research project concept development (**Anya and Dr. Sam**)
• Identify and engage research collaborators, mentors, partners (**All**)
• Provide grantsmanship support (**Anya and Dr. Sam**)
• Statistical support/consulting (**Julia**)
• Proposal review – scientific, technical, editorial (**Anya and Dr. Sam**)
• Facilitate large interdisciplinary grant development efforts (**Anya**)
• Assist with a broad range of administrative tasks at the pre- and post-award stages, including budget development, compliance, application package assembly, award management, and interfacing with the UCF Office of Research and Commercialization (**Elise**)

ADR Website:
https://med.ucf.edu/research/
Federal Funding Opportunities

• **www.grants.gov** – a federal grant opportunities search engine (open)

• **www.fedbizopps.gov** – a federal contract opportunities search engine (open)

• National Institutes of Health (NIH) Office of Extramural Research

• **http://grants.nih.gov/funding/index.htm**

• National Science Foundation (NSF) [http://www.nsf.gov/funding/](http://www.nsf.gov/funding/)

• Pivot ([www.pivot.cos.com](http://www.pivot.cos.com)) – a search portal for government and private grant funding sources, including international funding sources and collaborators (subscription is paid by UCF)
State of Florida Funding Opportunities

- **Florida Department of Health**
  - James & Esther King Biomedical Research Program
  - Bankhead-Coley Cancer Research Program
  - Ed & Ethel Moore Alzheimer’s Disease Research Program
Private Funding Opportunities

- **Foundation Center’s Philanthropy News Digest** – RFPs submitted by grant makers
- **Foundation Directory Online** – search for grant makers nationwide
- **Guidestar** – search for foundations using keywords
- **Health Grants Information Center** – listing of 100 largest U.S. grant making foundations
Internal Grant Opportunities

- **COM Internal “Seeding” Grants**: up to $20,000 per project, traditional proposal or “Shark Tank”- style submission options (Currently accepting proposals)

- **UCF In-House Research Grants**: $7,500 per project, but larger amounts may be considered, managed by the Office of Research and Commercialization (ORC), currently open through Oct 3, 2016

- **Central Florida Health Research Grants** – up to $20,000 per project, a collaboration between UCF and Florida Hospital managed by the ORC, rolling submission with periodic calls for specific projects

- Matching Funds are available
Opportunities for Young Investigators

• NIH Research Career Development K-Awards

• NSF CAREER Awards

• UC Berkley Database of new and young faculty opportunities
# MedEd Grant Opportunities

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<th>American Educational Research Association (AERA)</th>
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<td>Association of American Medical Colleges</td>
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<td>National Board of Medical Examiners</td>
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<td>The Spencer Foundation</td>
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Thank You!
RESEARCH QUESTIONS AND HYPOTHESES

Julia N. Soulakova
Office of the Associate Dean for Research (ADR) Team
Examples of research questions

Too simple

Too narrow

Too broad (unfocused)

Source: https://cirt.gcu.edu/research/developmentresources/tutorials/question
Examples of research questions

Too simple
Too narrow
Too broad (unfocused)

What is the childhood obesity rate in Orlando, FL?

Source: https://cirt.gcu.edu/research/developmentresources/tutorials/question
Examples of research questions

What is the childhood obesity rate in Orlando, FL?
Can be answered with a simple statistic (p)

Source: https://cirt.gcu.edu/research/developmentresources/tutorials/question
Examples of research questions

What is the childhood obesity rate in Orlando, FL?

How does the education level of the parents impact childhood obesity level in Orlando, FL?

Source: https://cirt.gcu.edu/research/developmentresources/tutorial/question
Examples of research questions

Too simple

Too narrow

Too broad (unfocused)

What are the effects of tobacco use in the United States?

Source: https://cirt.gcu.edu/research/developmentresources/tutorials/question
Examples of research questions

- Too simple
  - What are the effects of tobacco use in the United States?
- Too narrow
- Too broad (unfocused)
  - too broad to be discussed in a typical paper

Source: https://cirt.gcu.edu/research/developer/resources/tutorials/question
Examples of research questions

What are the effects of tobacco use in the United States?

Too simple

How does youth tobacco use correlate with academic performance in the US?

Too narrow

Less broad

Source: https://cirt.gcu.edu/research/developmentresources/tutorials/question
Examples of research questions

Too simple

Too narrow

Too broad (unfocused)

What health apps for cell phones are currently available?

Source: https://cirt.gcu.edu/research/developmentresources/tutorials/question
Examples of research questions

Too simple

What health apps for cell phones are currently available?

Too narrow

No need to collect unique data, just a simple online search, no analysis needed

Too broad (unfocused)

Source: https://cirt.gcu.edu/research/developmentresources/tutorials/question
Examples of research questions

- More complex
- Too narrow
- Too broad (unfocused)

What health apps for cell phones are currently available?

What are the benefits of a free health app with an e-diary for smoking cessation?

Source: https://cirt.gcu.edu/research/developmentresources/tutorials/question
Scientific Hypothesis

“A hypothesis is an educated guess or proposition that attempts to explain a set of facts or natural phenomenon. It is used mostly in the field of science, where the scientific method is used to test it”

Read more at http://examples.yourdictionary.com/examples-of-hypothesis.html#VFLdzRYP28IlgqCR.99
Key Features

- The goal of a scientific hypothesis is to help explain the focus and direction of the research.

- Should be linked to the RQ.
Key Features

A scientific hypothesis should contain the following info:

- the purpose of the research
- what variables are used
- what parameters are used (for a statistical hypothesis)
Example

RQ: How does the education level of the parents impact childhood obesity in Orlando, FL?
Example

RQ: How does the education level of the parents impact childhood obesity in Orlando, FL?

Scientific Hypothesis: Higher education level of parents is associated with lower childhood obesity level (in Orlando, FL)
Example

RQ: How does the education level of the parents impact childhood obesity in Orlando, FL?

Scientific Hypothesis: Higher education level of parents is associated with lower childhood obesity level (in Orlando, FL)
Scientific Hypothesis: Higher education level of parents is associated with lower childhood obesity level (in Orlando, FL)

Statistical Hypothesis: the rate of obese children in families with lower parental education level is higher than the rate of obese children in families with higher parental education level (in Orlando, FL)
RQ: How does the education level of the parents impact childhood obesity in Orlando, FL?

Scientific Hypothesis: Higher education level of parents is associated with lower childhood obesity level (in Orlando, FL)

Statistical Hypothesis: the rate of obese children in families with lower parental education level is higher than the rate of obese children in families with higher parental education level (in Orlando, FL)

\[ p_{\text{lower}} > p_{\text{higher}} \]

Key variables: obesity indicator (yes, no) parental education level (high, low)
Importance

The study design and methodology depends on your RQ and stated hypotheses

Statistical hypotheses are used
(1) in power analysis to compute and justify the proposed sample size
(2) to “define” the statistical analyses techniques, e.g., two-sample test for Binomial proportions
THANK YOU!
MANAGING CITATIONS

Tips for a less stressful research experience

Shalu Gillum, JD, MLS, AHIP
Head of Public services

Natasha Williams, MLIS
User Services Librarian
Tips for a less stressful research experience

Why use EndNote?

• EndNote works with Word to correctly format your references in 100s of citation styles
• Quickly and easily switch from one citation style to another
• Share references with colleagues
• Keep track of references for future projects
Tips for a less stressful research experience

SCENARIO #1
You’ve already conducted your research and have a LOT of references…but you did NOT use EndNote.

SCENARIO #2
You haven’t started your literature search / you are about to ask a librarian to help you start your literature search.
Scenario #1 – References but no Endnote!

Tips:

- Fear not: A librarian can assist you with getting all of your references into EndNote
- **Download and install** EndNote onto your desktop and/or laptop (you may need help from IT for an admin password; do this from on campus if using your laptop)
- See a librarian for training on EndNote and/or consult our [EndNote library guide](#)
- If you’ve already written your manuscript and did not use EndNote and now are having to make edits to your paper, please see a librarian!
Scenario #2 – No references...yet

Tips:

• Get your references into EndNote WHILE conducting your literature search!

• You can import references into EndNote from almost any database, not just PubMed, and even Google Scholar

• Download and install EndNote onto your desktop and/or laptop (you may need help from IT for an admin password; do this from on campus if using your laptop)

• See a librarian for training on EndNote and/or consult our EndNote library guide
COPYRIGHT

A few things to keep in mind
Copyright

A few things to keep in mind while doing your research:

• You will likely need permission to reuse an image/chart/graph/survey you found in the literature

• A librarian can assist you with using the Copyright Clearance Center website to obtain permission

• CAVEAT: There may be costs involved with reuse with permission
Faculty in the **Department of Statistics** are willing to collaborate with you in conducting joint research and submitting research proposals.

Statistical Consulting Request Forms can be located on the UCF Statistics webpage: [https://sciences.ucf.edu/statistics/consulting/request-form/](https://sciences.ucf.edu/statistics/consulting/request-form/)
RESEARCH ADMINISTRATION

Office of the Associate Dean for Research (ADR) Team
Research Administration

- Various regulations, policies and guidance govern proposal submissions
  - Federal, state, agency and university

- Regulations, policies and guidance relate to (not exhaustive):
  - Budget Preparation
  - Personnel Considerations
  - Compliance Aspects (e.g. export control, facilities security, IRB)
  - Agency allowance/considerations

- COM Office of Research assists with navigating the regulations, policies and guidance as it relates to the specific research project
  - Each project is unique – different considerations need to be reviewed for each project
  - Contact COM Office of Research early in the proposal process
WRITING SUPPORT

• Solicit feedback from peers in your field

• Utilize the Research Paper Peer Review Worksheet

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<th>Category</th>
<th>Criteria</th>
<th>Notes on Criteria</th>
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| Problem Statement | • Purpose is clearly identified and communicated  
                   • Type of study clearly identified  
                   • Description of study is commensurate with the type of study (i.e. quantitative study includes hypothesis) |                  |
| Research Design   | • Sample is clearly identified  
                   • Sample is congruent with study purpose  
                   • Sampling procedures are described (i.e. random selection, convenience, etc.)  
                   • Data collection methods are clearly identified |                  |
| Results           | • Results presented are congruent with research question  
                   • Analysis process is described (i.e. quantitative stats or qualitative approach)  
                   • Provides evidence to support reliability and validity of instruments used |                  |
| Conclusions       | • Conclusions and interpretations are supported by data  
                   • Limitations or qualifiers are identified  
                   • Potential impact of current results are described |                  |
| Overall           | Clarity of writing  
                   Abstract:  
                   • Is organized and succinct  
                   • Flows well  
                   • Is easily understood |                  |
| Overall           | Importance of topic  
                   Relevant to field |                  |
| Additional Notes  |                                                                         |                  |
Questions?