RCR Summer Seminar Series

Collaborative Research

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Reminders

- You must log in with UFL email in order to receive certificate credit
- Please take the survey after the class—we value your feedback
- In order to allow for free flow of ideas and questions, we will not record the session
- Slides and other materials will be sent to attendees after the class





RCR Certification

- Mentor/Mentee Relationships- Finding the Right Balance
- Collaborative Research
- Conflicts of Interest
- Data Management and Artificial Intelligence
- Compliance at UF
- Research Misconduct Overview
- Research Misconduct: Plagiarism
- Research Misconduct: ORI: The Lab
- Ethics of Authorship
- Rigors of Peer Review
- Reproducibility & Replicability
- IRB & Informed Consent
- Export Control Overview Including an overview of Dual Use Technology
- Putting it All Together

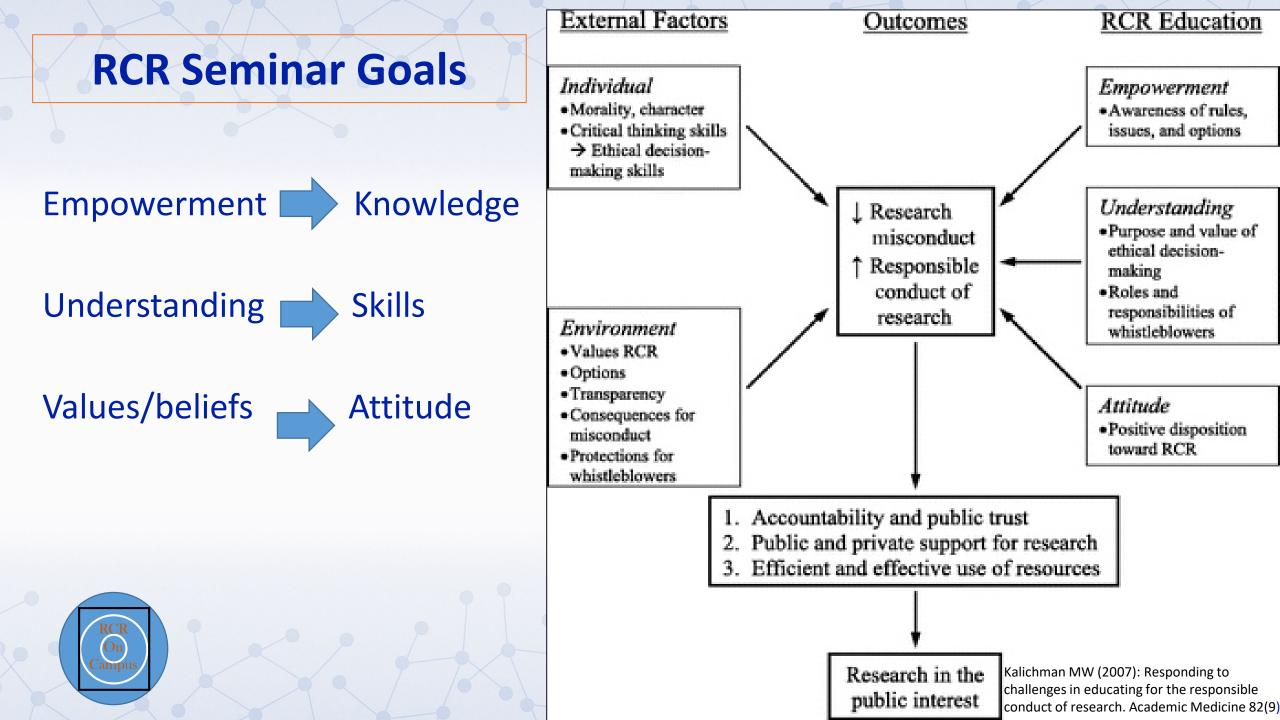


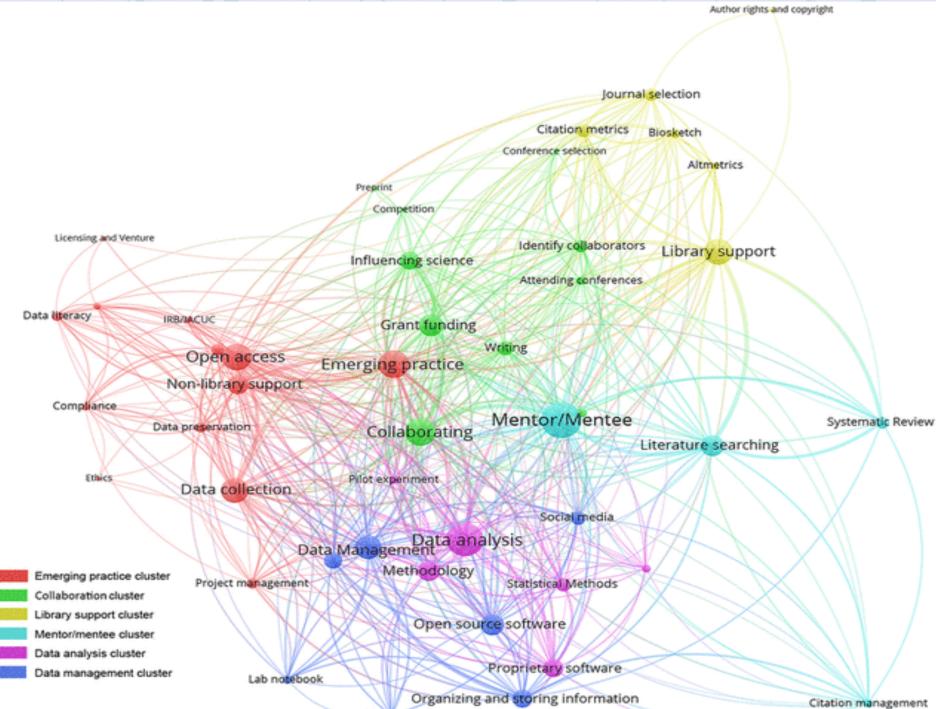
Agenda

- Why RCR?
- Defining collaborative research
- Types of collaboration
- Identifying challenges
- Resolving challenges
- How UF Research can help
- Resources









Metadata

Visual representation of the research lifecycle

Ragon, B. (2019). Alignment of library services with the research lifecycle. Journal of the Medical Library Association, 107(3), 384–393. doi:https://doi.org/10.5195/jmla.2019.595.



What do you think of when you hear the term Collaborative Research?





Let's play the match game!

- 1) Convergence Research
- 2) Multidisciplinary Research
- 3) Transdisciplinary Research
- 4) Interdisciplinary Research



- a) Integrating knowledge, methods, and expertise from different disciplines and forming novel frameworks to catalyze scientific discovery and innovation.
- b) Any study or group of studies undertaken by scholars from two or more distinct scientific disciplines. The research is based upon a conceptual model that links or integrates theoretical frameworks from those disciplines, uses study design and methodology that is not limited to any one field, and requires the use of perspectives and skills of the involved disciplines throughout multiple phases of the research process. Blurring professional boundaries.
- c) A process that is additive, not integrative; disciplinary perspectives are not changed, only contrasted.
- d) Research efforts conducted by investigators from different disciplines working jointly to create new conceptual, theoretical, methodological, and translational innovations that integrate and move beyond discipline-specific approaches to address a common problem.



- a) CONVERGENT: integrating knowledge, methods, and expertise from different disciplines and forming novel frameworks to catalyze scientific discovery and innovation.
- **b) INTERDISCIPLINARY:** any study or group of studies undertaken by scholars from two or more distinct scientific disciplines. The research is based upon a conceptual model that links or integrates theoretical frameworks from those disciplines, uses study design and methodology that is not limited to any one field, and requires the use of perspectives and skills of the involved disciplines throughout multiple phases of the research process. Blurring professional boundaries.
- c) MULITDISCIPLINARY: A process that is additive, not integrative; disciplinary perspectives are not changed, only contrasted.
- d) **TRANSDISCIPLINARY:** research efforts conducted by investigators from different disciplines working jointly to create new conceptual, theoretical, methodological, and translational innovations that integrate and move beyond discipline-specific approaches to address a common problem.

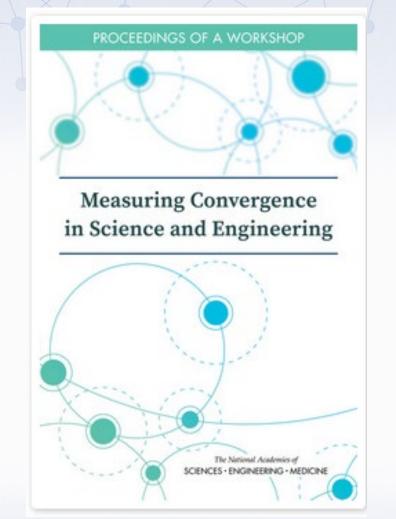


Convergence: NSF definition

It is driven by a specific and compelling problem, and it requires deep integration across disciplines.

The convergence paradigm "intentionally brings together intellectually diverse researchers to develop effective ways of communicating across disciplines by adopting common frameworks and a new scientific language.

This may in turn help solve the problem that necessitated the collaboration, resulting in novel ways of framing research questions and opening new research vistas."



https://www.nap.edu/download/26040



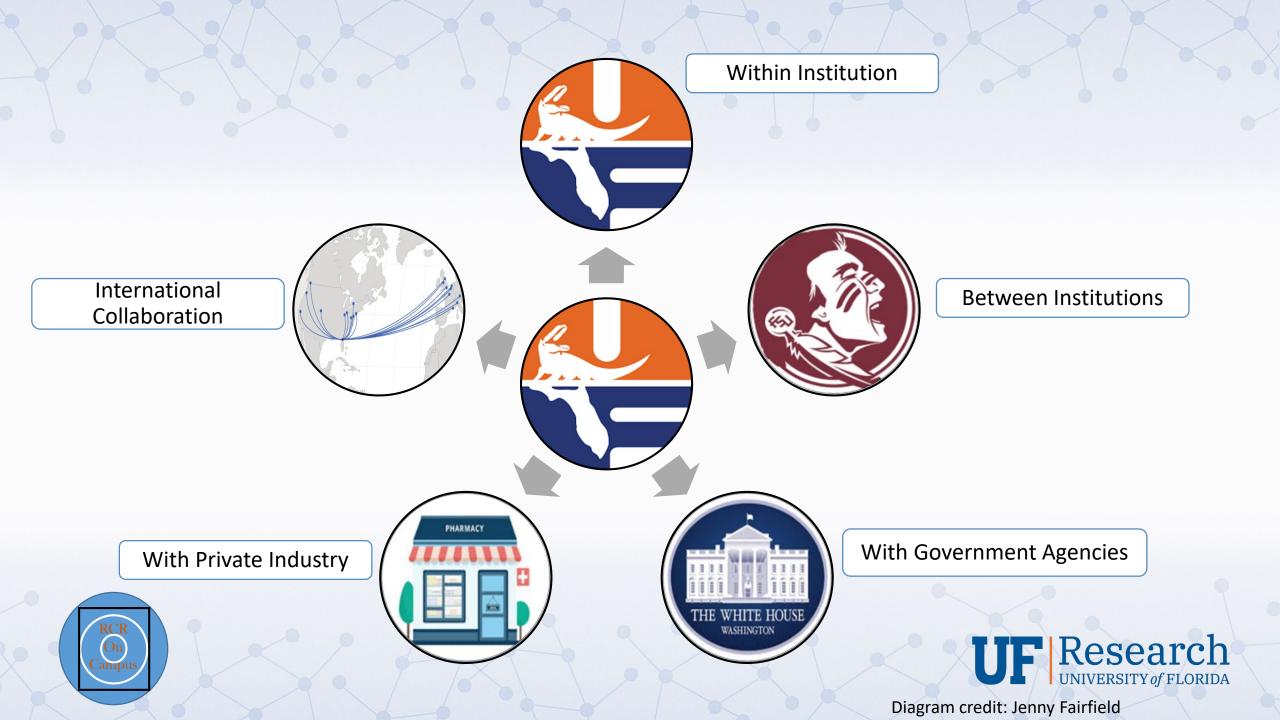




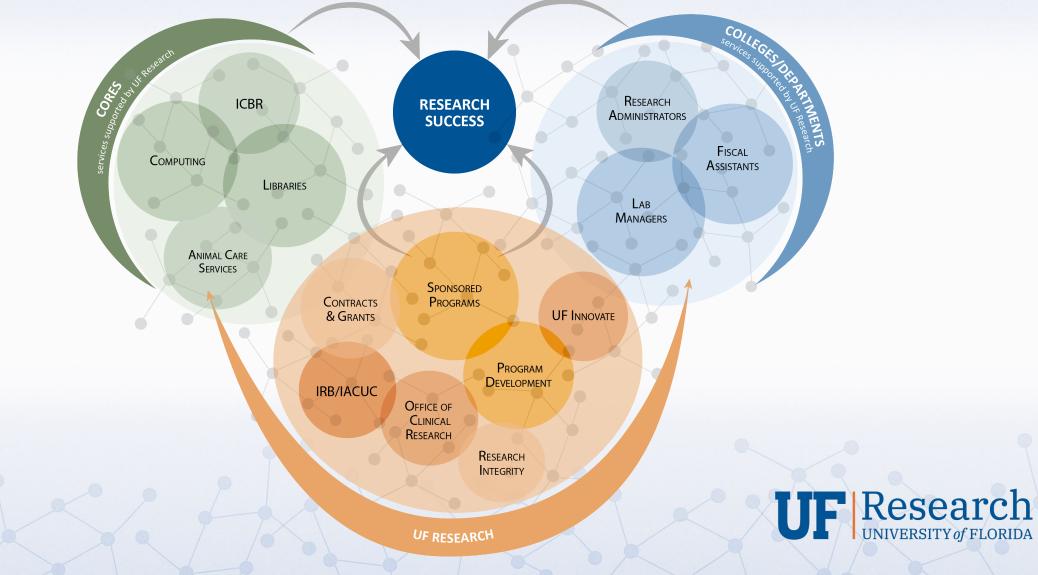
Types of collaborative research







UF Research Enterprise collaborative research



Examples of collaboration @ UF

Engaging NASA Workshops - May 24th & 27th



involved in NASA-funded research projects, including a key Perseverance and an active role in the LISA gravitational with Category: IRB News, IRB News, 2021 faculty also play key roles in developing state-of-the-art tech missions.

But UF has significant untapped potential for NASA researc Slides: Strong Submissions: IRB Basics for Gator Grads researchers from across the institution to participate in two workshops, where current NASA-funded researchers will sh Zoom recording: Strong Submissions: IRB Basics for Gator Grads experiences and familiarity with space-related research. Pril brainstorm how researchers can add a NASA component to funded by other federal agencies like the National Science I National Institutes of Health, the Department of Defense and Energy.



The University of Florida currently has more than 150 UF fa Resource: Brown Bag: IRB Basics for Gator Grads

Published: March 26th, 2021

space missions and figuring out how to feed and sustain asl Slides from the March 24, 2021 IRB Brown Bag: IRB Basics for Gator Grads, presented by Lauren N. Griffin, PhD, UF IRB Research Regulatory Analyst III, can be found here.



« Resource: Brown Bag: Protocols. Recruitment, Consent

Resource: IRB Forum: Open Access Data » Banks and sIRB Made Simple

Brown Bag Lunch with SA+AH Studio Art Faculty

School of Art + Art History School of Art + Art History



SA+AH Studio Art Faculty

ng in the 51stANNUAL FACULTY EXHIBITION will talk about their work

Bring Your Lunch! Cookies & Beverages Provided

Friday, January 29th, 12-1PM **UNIVERSITY GALLERY • FINE ARTS B BUILDING**

(exhibition open to the public January 12-29, 2016)

of ART + PT HISTOP

Learn more and register for the Engaging Nasa Workshops.

Group activity:

Breakout room: quick intro (name, dept, job) – 30 seconds each Directions: Choose 1 question to answer. 4 minutes

- 1. Why do we need collaborative research?
- 2. Why should collaborative research be encouraged?
- 3. Are there any drawbacks to collaborative research?





Challenges of collaborations & research integrity



- Cultural Differences
- Language Barriers
- Global Time Zones
- International Requirements
- Intellectual Property
- Authorship
- Mentorship
- IRB/IACUC compliance



Resolving challenges & the role of responsible conduct of research



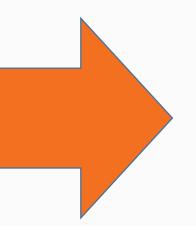


Resolving challenges

Previously Stated Challenges

- Cultural / Language
- Global Time Zones
- International requirements
- Consistency across sites
- Intellectual Property
- Authorship; order of

authorship



Resolution to Challenges

- Background knowledge
- Flexibility
- Research & establish prior to start
- Training coordination
- Fully executed agreements
- Authorship order defined in

agreement





Resolving challenges: Get a Pre-Nup!



Preempting Discord: Prenuptial Agreements for Scientists

By Howard Gadlin, NIH Ombudsman, and Kevin Jessar, NIH Associate Ombudsman





Resolving challenges: Get a Pre-Nup!

- the goals of the project and anticipated outcomes;
- the role each partner in the collaboration will play;
- how data will be collected, stored, and shared;
- how changes in the research design will be made;
- who will be responsible for drafting publications;
- the criteria that will be used to identify and rank contributing authors;
- who will be responsible for submitting reports and meeting other requirements;
- who will be responsible for or have the authority to speak publicly for the collaboration;
- how intellectual property rights and ownership issues will be resolved; and
- how the collaboration can be changed and when it will come to an end.



https://ori.hhs.gov/content/Chapter-8-Collaborative-Research-Introduction https://ori.hhs.gov/preempting-discord-prenuptial-agreements-scientists



Sharon, Ben and Terra met during a late-night discussion at a professional meeting. They share a common interest in learning disorders but come from different scientific backgrounds. Sharon works on cutting edge brain imaging technology. Ben is an educational psychologist interested in pre-school children in inner cities. Terra has been putting her knowledge as a physiologist to work exploring the effects of alternative medicines.

As late night turns to early morning, the newly met trio begin to see benefits from working together and start sketching out a grant proposal. The scientific ideas quickly fall into place, but some of the logistics raise questions that need answers. 1) What type of collaborative research is this?

List the considerations!



NEW DISCOVERIES FOR OUR STATE, OUR NATION AND THE WORLD

UF faculty conduct nearly \$1 billion in research annually. Research at UF plays a significant role in advancing our fundamental understanding of the world in which we live, generating creative breakthroughs that lead to new technologies, promoting economic growth in the state, and changing the trajectory of young people through education.

UF Research Can Help!





UF Research Can Help

- Consider what you are trying to achieve and whether an institutional agreement would be beneficial
- UFR can facilitate drafting and executing
 - Teaming Agreements
 - MOUs
 - Collaborative agreements
 - Non-disclosure agreements
 - Material Transfer Agreements
- UFR agreements can protect IP, clearly spell out expectations and make sure both parties, and their institutions, understand roles and responsibilities



What Agreement is Best?

- Many types of collaborations don't need an agreement
- Consider:
 - Formality of the collaboration
 - Anticipated outcomes (IP, publications, etc.)
 - Anticipated length of collaboration
 - Number of collaborators
 - Location of collaborators (same university, same state, same country)
- If the collaboration is part of Sponsored Research, then the agreement may be a subaward



What Agreement is Best?

- the goals of the project and anticipated outcomes;
- the role each partner in the collaboration will play;
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https://ori.hhs.gov/content/Chapter-8-Collaborative-Research-Introduction







Resources





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- Steneck, Nicholas H. ORI Introduction to RCR: Chapter 8. Collaborative Research. <u>https://ori.hhs.gov/content/Chapter-8-Collaborative-Research-Introduction</u>







• Please take the survey at:

https://ufl.qualtrics.com/jfe/form/SV_1WVLQUcrykr7YFM





If You Suspect Research Misconduct...

<u>Research Misconduct</u> means fabrication, falsification, or plagiarism in proposing, performing, or reviewing research, or in reporting research results.

Questionable Research Practices are reports of careless, irregular, or contentious research practices, as well as authorship disputes, may not meet the standard for research misconduct but may be a research integrity violation.



Make a **confidential report** to the UF Research Integrity Officer (RIO)

Cassandra C. Farley (352) 273-3052 | cfarley@ufl.edu

You may also report anonymously UF Compliance Hotline: 877-556-5356



Still not sure if it is Misconduct or a QRP? The RIO can help you better understand the situation. You can speak in hypotheticals as you consider making an official allegation.

