

**UNIVERSITY OF FLORIDA
COLLEGE OF VETERINARY MEDICINE
9th ANNUAL RESIDENT RESEARCH TRAINING WORKSHOP
FALL 2021**

November 8 to November 18, 2021 (Block M) and December 2, 2021

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Residents at UF College of Veterinary Medicine are expected to complete at least one research project suitable for peer review and publication in a scientific journal prior to graduation. In addition, residents are expected to present their research findings at local, national, or international scientific forums. A research project can be an observational study or an experimental study that requires a hypothesis, an objective, a research plan, data collection, analysis and interpretation, and preparation of a manuscript for publication in a scientific journal.

This workshop is designed to help residents acquire the necessary skills to formulate, implement, and evaluate a clinical research study during the residency period.

OBJECTIVE

To create opportunities for residents to gain new knowledge and skills in clinical research methods.

RESIDENT LEARNING OUTCOMES

- The resident will identify a clinical research question of interest and be able to design an appropriate study.
- The resident will prepare and submit a clinical research protocol for evaluation and feedback.
- The resident will deliver a twelve-minute oral presentation describing her/his clinical research protocol to peer-residents and UF mentors. The presentation will be followed by a three-minute Q&A session.
- The resident will prepare a manuscript suitable for peer review and publication in a scientific journal prior to graduation.

PREREQUISITES

- Must be a Resident at the UF College of Veterinary Medicine.
- **Must attend all sessions scheduled in this Workshop—including oral presentations of research protocols by peer-residents on Thursday, December 2, 2021 from 10.00am to 4.00pm.**
- **Must provide a resident research study objective statement with approval of her/his mentor no later than October 25, 2021.**

- Laptop with wireless internet capability.
- Department chair's and service chief's approvals.

FORMAT

Part I. The Resident Research Training Workshop consists of 14 sessions during the two-week period of **November 8 to November 18, 2020 (Block M)** at a designated CVM location/format (TBA); see schedule below.

In general, the workshop will consist of lectures on (1) working with IACUC and the Veterinary Hospitals Research Review Committee; (2) scientific writing; (3) statistics for residents; (4) sampling and sample size; (5) evaluation of diagnostic tests; (6) design and analysis of experimental studies; (7) observational studies: design, data analysis and interpretation; and (8) basic instruction in data analysis.

In addition, (9) the resident will prepare and deliver a twelve-minute oral (pptx) presentation of her/his research protocol on **December 1, 2021 (10.00am to 4.00pm)**. The presentation will be followed by three-minute Q&A session.

Finally, (10) the resident will prepare and submit her/his clinical research protocol. The protocol should be prepared in WORD, typed double-spaced and be no longer than six pages (plus references). The protocol is due on **December 2, 2021** and should be sent via e-mail to hernandezja@ufl.edu for review and feedback from designated workshop instructors. This deadline is firm. Residents can expect feedback from a designated reviewer(s) no later than **December 31, 2021**. It is expected that participation in this workshop will help residents prepare a sound and competitive proposal for funding through the UF CVM Resident Research Grant Competition in Spring 2021 or other sources.

All Residents enrolled in this Workshop are required to attend all presentations scheduled to be held on December 2, 2021 (10.00am to 2.00pm). Please plan accordingly with your service chief and peer-residents.

Part II. The resident will implement and evaluate her/his research project under the supervision of a designated research mentor. If necessary, the resident can reach out to the course instructors for further guidance and assistance in data analysis and interpretation, manuscript writing, or during a response to journal reviewers.

OFFICE HOURS E-mail is the best way to schedule an appointment.

COST OF REGISTRATION FOR RESIDENTS

\$150 per participant.

FUNDING

The Departments' Chairs are prepared to use departmental funds to sponsor residents with interest in participating in this Resident Research Training Workshop.

SUGGESTED READING

Leon Gordis. Epidemiology. 4th Edition. WB Saunders Company.

For more information, please contact the workshop coordinator (Jorge Hernandez at hernandezja@ufl.edu).

TENTATIVE SCHEDULE (BLOCK M)

Date	Day	Time	Topic	Presenter	Location/Format	
11/8	M	10.00-10.05	Welcome remarks and introductions	Lewis	Banfield B	
		10.05-10.15	The Resident Research Training Workshop: Overview	Hernandez		
		10.15-11.00	Working with the UF Institutional Animal Care and Use Committee (IACUC)	Mallicote		
		11.10-12.00	Working with the UF CVM's Hospital Research Review Committee (VHRC)	O'Kell		
		12.00-1.00	Box lunch (provided)			SAH designated area TBA
		1.10-3.00	Review of Residents' study objective statements	Residents Hernandez	Banfield B	
11/9	T	10.00-10.50	Unpublished research is not research. Common errors in scientific writing. The peer-review process.	Wellehan	Banfield B	
		11.00-11.50		Lewis		
11/10	W	10.00-12.00	Observational studies: cross-sectional studies, case-control studies, cohort studies. Design, how many animals do I need, data analysis	Hernandez	Banfield B	
11/11	Th	Veterans Day (observed)				
11/12	F	10.00-12.00	Statistics for residents: choosing the appropriate statistical test	Santoro	Banfield B	
		1.00-2.00	Computer Lab: basic instruction in data analysis	Hernandez	CVM Education Center Comp Lab	
11/15	M	10.00-12.00	Design and analysis of experimental studies	Hill	Banfield B	

11/16	T	10.00-12.00	An introduction to systematic review and meta-analysis for clinical research	Denagamage	Banfield B
11/17	W	10.00-12.00	Evaluation of diagnostic tests: sensitivity, specificity, predictive values	Hernandez	Banfield B
11/18	Th	10.00-12.10	My research question of interest is? *	Residents Hernandez	Banfield B
12/2	Th	10.00-12.00	Oral presentations of clinical research protocols**	Residents Mentors Instructors	Banfield B
		12.00-1.00	Box lunch (provided)		SAH designated area TBA
		12.45-2.00	Oral presentations of clinical research protocols**	Residents Mentors Instructors	Banfield B
			Written clinical research protocols are due today.		

* **My research question of interest is? Five-minute Resident Presentations on November 18th.** The purpose of this session is to give Residents the opportunity to share her/his study objective and an overall research approach to address the study objective (five minutes).

You are expected to come prepared with a five-minute pptx presentation. Each presentation will be followed by a 3-5 min Q&A session. The instructor will use a timer to keep all presentations on time. After four minutes, please be prepared to wrap-up your presentation. The instructor will be polite but firm to keep everybody on time, so we finish our business by 12.00pm noon. You can practice your presentation, so you know you can finish on time.

You can use the following (optional) outline for your presentation: Title, background information, study objective(s), study population, study sample, study design, data collection and follow-up period, null hypotheses and statistical tests that will be used to test each hypothesis, expected results, summary. You should prepare no more than 10 slides. At the end of four minutes, you should be prepared to wrap-up your presentation and summarize your overall research approach. In previous years, several participants have used too much time (3 minutes) on background information with little time to present the study methodology. Title, background and study objective slides should be covered in one minute (maximum). There is no need to go in detail about the study background and justification. We trust your study is relevant. The main purpose is to have an appreciation of the methods that you will use to accomplish your study

objective(s).

**The deadline of December 2nd is firm.

(i) Twelve-minute oral presentation

You are expected to come prepared with a 12-minute pptx presentation. Each presentation will be followed by a 3-min Q&A session. The instructor will use a timer to keep all presentations on time. The timer alarm will go off after 10 minutes, an indication that you have two additional minutes to wrap-up your presentation. The instructor will be polite but firm to keep everybody on time, so we finish our business by 2.00pm.

(ii) Written protocol

You are expected to prepare and submit a written protocol of your research project (WORD doc, six-pages maximum (double-spaced; one-inch margins Top, Bottom, Left, Right; Times New Roman font size 12) plus references. You can use the following (optional) outline: Title, Resident's name, background information, study objective(s), study population, study sample, study design, data collection and follow-up period, null hypotheses and statistical tests that will be used to test each hypothesis, expected results, pitfalls and limitations, references.

Evaluation of clinical research protocols and feedback will be provided in writing to each resident by the instructors four weeks after the research protocol is submitted.

INSTRUCTORS

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