Ludovica CHIAVACCINI, Thomas DENAGAMAGE, Sally DENOTTA, Lana FAGMAN, Jorge HERNANDEZ, Richard HILL, Dan LEWIS, Martha MALLICOTE, Domenico SANTORO, Jim WELLEHAN

October 23-November 3, 2022 (Block L)

Deriso Hall Conference Room + SAH Banfield Room B (third floor)

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 15-minute oral presentation describing her/his clinical research protocol to peer-residents and UF mentors. The presentation will be followed by a five-minute Q&A session.
- Participant residents are expected to submit a sound grant proposal for funding through the Annual CVM Resident Research Grant Competition in Spring.
- 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 <u>all</u> sessions scheduled in this Workshop—including oral presentations of research protocols by peer-residents on <u>Friday</u>, <u>November 3</u>, 2023 from 10.00am to 5.00pm.
- Must provide a resident research study objective statement with approval of her/his mentor no later than Monday, October 16, 2023.
- Laptop with wireless internet capability.
- Department chair's and service chief's approvals.

FORMAT

Part I. The Resident Research Training Workshop consists of 17 sessions during the two-week period of **October 23 to November 3, 2022 (Block L)**. All sessions will be held at Deriso Hall

Conference Room + SAH Banfield Room B (third floor); see schedule below. Deriso Hall is on Shealy Drive (one story building, green metal roof) across the SAH.

In general, the workshop will consist of lectures on (1) working with IACUC and the Veterinary Hospitals Research Review Committee; (2) scientific writing; (3) sampling and sample size calculations; (4) statistics for residents; (4) sampling and sample size calculations; (5) evaluation of diagnostic tests; (6) design of experimental studies; (7) discussion of different study designs, data collection and data analysis; (8) an introduction to systematic reviews and meta-analysis in clinical studies.

In addition, (9) the resident will prepare and deliver a 15-minute oral (pptx) presentation of her/his research protocol on **November 3, 2023 (10.00am to 5.00pm)**. The presentation will be followed by five-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 1, 2023** 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, 2023**. 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 2024 or other sources.

All Residents enrolled in this Workshop are required to attend <u>all presentations</u> scheduled to be held on <u>November 3, 2023 (10.00am to 5.00pm)</u>. <u>Please plan accordingly with your service chief and peer-residents</u>.

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 hernandezja@ufl.edu

SCHEDULE

Date	Day	Time	Topic	Presenter	Location
	•		Week 1		
10/23	М	9.30-9.35	Welcome remarks	Lewis	Deriso Hall
		9.35-9.45	The Resident Research Training Workshop: Overview	Hernandez	Deriso Hall
9.45-10.30			Working with the UF Institutional Animal Care and Use Committee (IACUC)	Mallicote	Deriso Hall
		10.30-11.15	Working with the UF CVM's Hospital Research Review Committee (VHRRC)	Fagman	Deriso Hall
	11.15-12.00 Can't I just be a horse doctor? How avoiding research made me a clinical researcher		DeNotta	Deriso Hall	
			12.00-1.00 Lunch (provided)		
		1.00-2.00	Review of Residents' study objective statements	Residents Hernandez	Deriso Hall
10/24	Т	10.30-11.30	Unpublished research is not	Wellehan	Deriso Hall
		11.30-12.30	research. Common errors in scientific writing. The peer-review process.	Hernandez	Deriso Hall
		12.30-1.30	Lunch (provided)		
		1.30-3.30	Statistics for residents, Part 1: How not to compile a dataset. aka.when dataset are fun but not good!	Chiavaccini	Deriso Hall
		3.30-5.00	Sampling and sample size	Hernandez	Deriso Hall
10/25	W	10.00-10.15	Review of the previous day	Hernandez	SAH Banfield Room B
		10.15-12.15	Statistics for residents, Part 2: Choosing the appropriate statistical test	Santoro	SAH Banfield Room B
		12.15-1.00	Lunch (provided)		
		1.00-2.00	An introduction to systematic review and meta-analysis for clinical research	Denagamage	SAH Banfield Room B
		2.00-3.30	Discussion of sample size calculations: specific scenarios presented by participant Residents	Residents Hernandez	SAH Banfield Room B
		3.30-5.00	Discussion on data collection in Excel and data analysis for own research projects	Residents Chiavaccini Denagamage Hernandez	SAH Banfield Room B
10/26	Th	10.00-10.15	Review of the previous day	Hernandez	SAH Banfield Room B
		10.15-12.15	Design and analysis of experimental studies	Hill	SAH Banfield Room B

	12.15-1.00 Lunch (provided)						
		1.00-3.00	Evaluation of diagnostic tests:	Hernandez	SAH Banfield		
			sensitivity, specificity, predictive		Room B		
			values				
10/27	F	10.00-12.00	Residents discuss their	Residents	SAH Banfield		
			research protocol with selected	Instructors	Room B		
			workshop instructors for				
			feedback. Instructors respond				
			to specific questions that				
			Residents may have about their				
			research protocol (introduction,				
			hypothesis, study objective,				
			study population,				
			inclusion/exclusion criteria,				
			study design, study outcomes,				
			laboratory procedures, data				
			collection, data analysis, other				
		40.00.4.00	(50 min, by appointment)				
		12.00-1.00	Lunch (provided)	D : - :	04110		
		1.00-5.00	Workshop instructors provide	Residents	SAH Banfield		
			guidance to Residents	Instructors	Room B		
			(continued) Week 2				
10/30	М	10.00-5.00	Residents and Mentors	Residents	SAH Banfield		
10/30	IVI	10.00-3.00	discuss their research protocol	Mentors	Room B		
			with selected workshop	Instructors	TOOM D		
			instructors for feedback (50	motractors			
			min, by appointment)				
10/31	Т	11.00-5.00	Residents and Mentors	Residents	Deriso Hall		
			discuss their research protocol	Mentors			
			with selected workshop	Instructors			
			instructors for feedback (50				
			min, by appointment)				
11/1	W	W Time for residents to prepare PPTX oral presentations of clinical research					
11/2	Th	protocols			T =		
11/3	F	10.00-12.00	Oral presentations of clinical	Residents	SAH Banfield		
			research protocols: 20 min	Mentors	Room B		
		10.00.1.00	(12min + 8min for Q&A)	Instructors			
		12.00-1.00	Lunch (provided)	Desit	CALLE C. I.		
		1.00-3.00	Oral presentations of clinical	Residents	SAH Banfield		
			research protocols (continued)	Mentors	Room B		
		2.00.2.20	Coffee Droots	Instructors			
		3.00-3.20 3.20-4.40	Coffee Break Oral presentations of clinical	Residents	SAH Banfield		
		3.20-4.40					
			research protocols (continued)	Mentors Instructors	Room B		
		4.40-5.00	Workshop evaluation (feedback	Residents	SAH Banfield		
		4.40-3.00	by Residents)	Nesidelits	Room B		
	Week 6						
12/1 F Written Resident research protocols (WORD) are due today							
12/1 1 Whiteh Resident research protocols (WORD) are due today							

12/29	F	Written reviews by designated reviewers (workshop instructors) a	are due today

Residents discuss their research protocol with selected workshop instructors for feedback (50-min, by appointment).

Location / Date	Time	Chiavaccini	Denagamage	Hernandez	Hill
SAH Banfield Room B	10-11				
Friday, October 27	11-12				
	1-2				
	2-3				
	3-4				
	4-5				

Residents and Mentors discuss their research protocol with selected workshop instructors for feedback (50 min, by appointment).

Location / Date	Time	Chiavaccini	Denagamage	Hernandez	Hill
SAH Banfield Room B	10-11				
Monday, October 30	11-12				
	1-2				
	2-3				
	3-4				
	4-5				
Deriso Hall	11-12				
Tuesday, October 31					
	1-2				
	2-3				
	3-4				
	4-5				

ORAL PRESENTATIONS AND RESEARCH PROTOCOLS

Oral presentations. Participant Residents are expected to come prepared with a 15-minute pptx presentation on **Friday**, **November 3**, **2023 (10.00am to 5.00pm)**. Each presentation will be followed by a 5-min Q&A session. After 12 minutes, please be prepared to wrap-up your presentation with a summary slide (objective, research approach, expected results, relevance to patient care). The instructor will be polite but firm to keep everybody on time, so we finish our business on time.

Research protocols. Participant Residents are expected to prepare and submit a written protocol of their research project to hernandezja@ufl.edu on **December 1, 2023 (by 11.59pm)**. The deadline of December 1st is firm. Format: 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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