

# Veterinary Clinical Pathology Residency and Graduate Program

Department of Biomedical Sciences and Pathobiology

Virginia-Maryland College of Veterinary Medicine

Virginia Tech

Updated: July 17, 2025

## Program Goals

The Combined Veterinary Clinical Pathology Residency and MS/PhD Program aims to train competent diagnostic clinical pathologists who are qualified for ACVP board certification and experienced in all aspects of research.

## Objectives

The program will provide residents with the following:

- Advanced training in veterinary clinical pathology
- Fulfillment of ACVP board eligibility requirements
- Graduate coursework toward an advanced degree
- Research experience, including study design, execution, scientific writing, and oral presentation
- Teaching experience

## Prerequisites

Mandatory prerequisites for application to the Program include:

- DVM or equivalent from an AVMA-accredited institution or foreign equivalent
- Admission to the Virginia Tech Graduate School and VMCVM programs  
(<https://graduateschool.vt.edu/admissions/how-to-apply.html>)

Highly recommended (but not mandatory):

- At least one year of post-DVM clinical experience

## Application Procedure

Candidates will be evaluated based on the following materials:

- Letter of intent
- Curriculum vitae
- Three letters of reference (at least one but preferably two from a clinical pathologist, and one commenting on research experience)
- Official transcripts from all institutions (undergraduate, graduate and professional schools attended)
- TOEFL scores (for applicants whose primary language is not English)

Submit all materials to the veterinary clinical pathology resident coordinator: **Dr. Christina Pacholec** ([pacholec@vt.edu](mailto:pacholec@vt.edu)), VMCVM, 205 Duckpond Drive, Phase II, Virginia Tech (0442), Blacksburg, VA 24061.

Application deadline: **September 15** prior to Program start.

**Note:** Admission to the residency is contingent on acceptance to the Graduate School.

## Administration of the Program

The Program is administered by the Department of Biomedical Sciences and Pathobiology (DBSP) and the Biomedical and Veterinary Sciences (BMVS) Graduate Program.

The Program **begins in early July and lasts 3–5 years**, depending on the graduate degree (MS/PhD).

**Table 1.** Approximate Timetable for the PhD/Residency; see BMVS Graduate Handbook for details on MS/PhD timelines: <https://intranet.vetmed.vt.edu/Academics/BMVSStudentInformation>

Year of Residency	Semester	Key Dates	Residency	PhD	
1	1	July start	Clinic duty	Form a committee	
			Course work	Lab Work	
	2			Clinic duty	Develop Plan of Study
				Course work	Formulate an initial research proposal
				Hold a committee meeting	
				Lab work	
2	3	Sept Apply Phase 1 Exam	Clinic duty	Refine research proposal	
			Course work	Hold a committee meeting	
				Lab work	
	4	March Phase 1 Exam	Clinic duty	Refine research proposal	
			Course work	Hold a committee meeting	
				Prelim Exam (may delayed to yr 4)	
				Lab work	
3	5		Clinic duty	Refine research proposal	
			Course work	Hold a committee meeting	
				Lab work	
	6	Feb Apply Phase II Exam	Clinic duty	Finalize research proposal	
			Course work	Hold a committee meeting (minimum 1/yr after Semester 5)	
			Lab work		
4	7	Aug Phase 2 Exam	Clinic duty	Hold a committee meeting (minimum 1/yr after Semester 5)	
				Lab work	
	8		Clinic duty	Hold a committee meeting (minimum 1/yr after Semester 5)	
				Lab work	
5	9		Clinic duty	Hold a committee meeting (minimum 1/yr after Semester 5)	
				Lab work	
	10		Clinic duty	Hold a committee meeting (minimum 1/yr after Semester 5)	
				Complete lab work	
				Write Dissertation	
			Dissertation Defense		

### Resident Coordinator

- The resident will be pre-assigned a board-certified clinical pathologist (ACVP) as Resident Coordinator.

### MS/PhD Advisor and Graduate Committee

- The resident will select a MS/PhD Advisor and Committee during the first year.
- At least one clinical pathologist from DBSP will be part of the Committee.
- The Advisor and Committee oversee the MS/PhD portion of the Program, which will not interfere with clinical pathology training.

### Clinical Pathology Residency

- Residents take an annual mock board exam until board certification.
- Annual evaluations by the clinical pathologists are reviewed with the resident; copies are retained by the Resident Coordinator.

### Clinical Pathology Service Duty

- Residents provide diagnostic services with an ACVP-boarded pathologist at the VMCVM Veterinary Teaching Hospital.
- Independent duty on weekends/holidays begins in the 2nd or 3rd year, at faculty discretion.

## Surgical Biopsy Service Duty

- Residents complete 15 days of service with an ACVP-boarded anatomic pathologist during the first 3 years.

Table 2. Approximate Time Residents will be on Service Duty.

Year in Program	Service Type	Approximate Duration	Comments
1 <sup>st</sup>	CP	60 days/year	This is a flexible schedule tailored to student
	SB	5 days/year	
2 <sup>nd</sup>	CP	90 days/year	1 month off for phase 1 boards
	SB	5 days/year	
3 <sup>rd</sup>	CP	90 days/year	2 months off for phase 2 boards
	SB	5 days/year	
4 <sup>th</sup>		20 days/year	
5 <sup>th</sup>		20 days/year	

Abbreviations: CP, clinical pathology; SB, surgical biopsies

## Time Off Service

- Time off is used for studying, coursework, presentations, manuscripts, research, and teaching.
- Residents receive 96 hours (12 days) of annual leave. University holidays and study time are not counted unless on duty.
- Annual leave does not reduce duty responsibilities.
- University breaks are not considered holidays if the VTH is open.
- Leave must be coordinated and approved by the MS/PhD advisor and residency coordinator and scheduled around duties.

## Teaching

- 1st year: Attend DVM lectures and labs led by clinical pathology faculty when possible.
- Years 2–5(6): Attend all labs.
- Participate in clinical instruction for senior students in the Laboratory Services Clerkship.
- Organize weekly Pathology Club case presentations at least once per semester.
- Assist with DBSP continuing education seminars.

## Coursework and Seminars

- Residents must complete Residency Program and BMVS Graduate Program coursework (see Graduate Handbook).
- All required courses must be completed within the first 3 years.
- Residents must maintain a cumulative GPA of at least 3.0 as required by the Graduate School.

**Table 3.** Clinical pathology residency courses.

Required resident courses and rounds				
Course	Name	Faculty	Freq	Credits
BMVS 5014	Animal path residency	Path faculty	weekly	variable
Indep study	Oncologic pathology (Meuten)	Zimmerman	weekly	3
Indep study	Hematology (Schalms)	CP faculty	weekly	3
Indep study	Clinical Chemistry Topics (Stockham/Tietz/DiBartola)	CP faculty	weekly	3
BMVS 5284	Cellular pathology (Cotran/Zackary)	Zimmerman	weekly	3
Audit	Adv Histopathology	Lammers	weekly	2
Attend	Histopathology rounds	Carvallo	1/month	na
Attend	Clin Path case rounds	CP faculty	weekly	na
Attend	Clin Path resident rounds	CP faculty	weekly	na

### Rounds

- Residents are required to attend, participate in, and lead weekly Cytology and Clinical Pathology Resident Rounds.
- Participation in weekly Histopathology Rounds (BMVS 5194) is expected at least once per month.

### Annual Meetings

- Residents are encouraged to submit a case or presentation annually to national meetings (e.g., ACVP/ASVCP).
- Residents must also present at the seminar series and the VMRCVM Annual Research Symposium (see Graduate Handbook).

### Funding

- Residents are encouraged to attend one conference per year.
- DBSP will cover costs above the \$1000 PD funding from ViTALS, with reasonable expenses.
- DBSP will cover \$1,700 in board expenses over three years.
- DBSP will also cover Tifton expenses (approx. \$250/person + \$300 van rental).
- Personal vehicle expenses will be reimbursed on a case-by-case basis if a van is not used.
- ViTALS will process all reimbursements; DBSP will supply funding codes as needed.

### Research and Publications

- Residents must be the primary author on at least one 'What is Your Diagnosis?' or 'Case Report' in a peer-reviewed journal.

### ACVP Boards

- Board eligibility is determined by the Program's clinical pathologists.

## Boards Preparation

- Residents are encouraged to schedule at least one week per month for dedicated board study.
- Protected preparation time includes:
  - 4 weeks before Phase 1 exam
  - 8 weeks before Phase 2 exam (first attempt)
- During protected time, there are no service, coursework, or research obligations.

### Requirements for Phase 2 board exam endorsement:

- Completion of service duties
- Completion of coursework
- Approved thesis/project draft (MS)
- At least one accepted peer-reviewed manuscript
- Passing or acceptable mock board scores

## Program Completion

Residents are encouraged to provide program feedback via an exit interview with the Department Head.

## Acknowledgement of Requirements

I have read, and I understand and agree to the Program's requirements.

	Printed Name	Signature	Date
Resident:	_____	_____	_____
Residency Coordinator:	_____	_____	_____
PhD Advisor:	_____	_____	_____

**I. CLINICAL PATHOLOGY RESIDENT EVALUATION**  
 Department of Biomedical Sciences and Pathobiology  
 Virginia-Maryland College of Veterinary Medicine  
 Virginia Tech

Date of Evaluation: \_\_\_\_\_

Resident: \_\_\_\_\_ Signature: \_\_\_\_\_

Resident Coordinator: \_\_\_\_\_ Signature: \_\_\_\_\_

Clinical Pathologist: \_\_\_\_\_ Signature: \_\_\_\_\_

Clinical Pathologist: \_\_\_\_\_ Signature: \_\_\_\_\_

	Exceeds Expectations	Meets Expectations	Needs Improvement
Knowledge	+	+	+
Skills	+	+	+
Responsibility	+	+	+
Attitude	+	+	+
Communication	+	+	+
Overall	+	+	+

Strengths: \_\_\_\_\_

\_\_\_\_\_

Areas for improvement: \_\_\_\_\_

\_\_\_\_\_

Courses taken: \_\_\_\_\_

Completed readings: \_\_\_\_\_

Current readings: \_\_\_\_\_

Completed projects/manuscripts: \_\_\_\_\_

Current projects/manuscripts: \_\_\_\_\_

Presentations given: \_\_\_\_\_

Other accomplishments: \_\_\_\_\_

General comments and recommendations: \_\_\_\_\_

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