Annual ACPV Approved Training Program Review Form

Updated March 2011

| Review Date: | 06/18/2015 |

1. Name of Training Program and Address:

North Carolina State University
College of Veterinary Medicine
Poultry Health Management
Residency and Master of Specialized Veterinary Medicine
1060 William Moore Dr.
Raleigh, NC 27607

2. Training Program mission, goals and objectives:

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<thead>
<tr>
<th>Mission</th>
<th>Goals</th>
<th>Objectives</th>
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Full description of the mission, goals, and objectives is expansive. I have attached our program plans and objectives for the program in an attachment. Please contact me if this is not acceptable.

3. Affiliated University(s):

North Carolina State University,
College of Veterinary Medicine

4. Primary Program Contact:

Michael Patrick
Martin mpmartin@ncsu.edu
5. When do your students graduate from the program? Circle all that apply

Students graduate from the program at the end of June.

5. ACPV Diplomate Faculty Members:

<table>
<thead>
<tr>
<th>Name</th>
<th>Address</th>
<th>Email</th>
<th>Tel</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Dr. H. John Barnes, ACVP, ACPV (NCSU CVM)</td>
<td>4700 Hillsborough St.</td>
<td><a href="mailto:John_barnes@ncsu.edu">John_barnes@ncsu.edu</a></td>
<td>919-513-6273</td>
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<td>2. Dr. Oscar Fletcher, ACVP, ACPV (NCSU CVM)</td>
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<td>4. Dr. James Guy, ACVM, ACPV (NCSU CVM)</td>
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<tr>
<td>6. Dr. Michael Martin (Chair), ACPV (NCSU CVM)</td>
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<td>7. Dr. Dennis Wages, ACPV (NCSU CVM)</td>
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<td>919-513-6282</td>
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Other Members:

1. Dr. Donna Carver, ACPV (NCSU Poultry Extension Services)
2. Dr. Jo Anna Quinn, ACPV (USDA)
6. Have there been any changes to the program since the previous year including program funding, staff, facilities support, etc? If so please explain.

Yes, we have received a significant funding cut to our program activities. We are currently working with allied poultry industry groups to make up for lost funding resources.

7. Current Student Enrollment 2014 - 2015 (number of students and names):

This year’s total enrollment:

Student’s names:

1. Christina Lindsey – graduate in June
2. Seiche Genger – started June 2014
3. Rebecca Jones – start at end of June 2015

8. Students that Graduated last year (2014) (number of students and names):

This year’s total enrollment:

Student’s names:

1. Tak Niino

8. How many students that graduated from your program submitted an application for the ACPV exam in 2014?

Two

9. Of these students, how many graduates were successful in their application to sit for the ACPV exam in 2014?

Two
10. How many or what percent of these participants passed all 3 sections of the ACPV exam?

Two

If the participant (s) did not pass the entire exam, how many passed 1 of 3 sections (1/3) of the exam?

If the participant (s) did not pass the entire exam, how many passed 2 of 3 sections (2/3) of the exam?
North Carolina State University College of Veterinary Medicine (NCSU CVM) offers a unique opportunity for post-veterinary professional development: a combined Residency (called House Officer) in Poultry Health Management and Master of Specialized Veterinary Medicine (MSpVM). Successful completion of this 24-month program will result in certification of Residency completion and a non-thesis Master’s degree. This program provides post-veterinary training in the identification and control of factors impacting poultry health and production. Goals of the program are to prepare veterinarians for productive roles in the modern poultry industry, and provide training and experiences to promote eligibility for certification by the American College of Poultry Veterinarians.

Poultry Health Management House Officers will be engaged in a two-year curriculum that includes participation in 1) field investigations and research related to poultry health management and disease prevention, 2) application and interpretation of diagnostic technology e.g. serology, microbiology, and pathology, 3) didactic and seminar courses on poultry health and epidemiological problem solving, 4) teaching activities of the Poultry Health Management faculty, and 5) production of commercial turkey and broiler flocks at the NCSU CVM Teaching Animal Unit.

The Poultry Health Management program makes use of resources at the NCSU College of Veterinary Medicine, NCSU Poultry Science Department & Cooperative Extension Service, North Carolina Department of Agriculture & Consumer Services (including Veterinary Services - Animal Disease Diagnostic Laboratories and Emergency Programs), Regional Office of the United States Department of Agriculture, integrated poultry production companies, and allied industries.

**Orientations**

CVM orientation for new PHM House Officers is concurrent with CVM interns or residents and occurs in the latter part of June/early part of July. The orientation typically begins at 8:00 AM in the Terry Center. Employment procedures, licensure, College, departmental and program policies and responsibilities, vehicle use, tour of facilities, and introductions will be covered. PHM House Officers will make an appointment with Dr. Michael Martin for orientation specific to the PHM program at the CVM including review of this Plans & Procedures document, discussion of the curriculum requirements, and review of CVM procedures relevant to the clinical activities of PHM House Officers.

**House Officer/MSpVM Student Responsibilities**

Dr. Martin will coordinate each MSpVM student’s plan of graduate study (curriculum) and coordinate the House Officer’s clinical and externship activities.
involvement in any project requiring a significant time commitment (travel, meetings, clinical trials, research projects, field experience, etc.) must be communicated in writing (e-mail OK) to Dr. Martin and approved by the Advisory Committee. Further, there is paperwork required by the CVM that must be filled out for travel, even if no reimbursement is requested.

PHM faculty members are Drs. John Barnes, Oscar Fletcher, Isabel Gimeno, Jim Guy, David Ley, Michael Martin and Dennis Wages. Members of the poultry industry and NC Department of Agriculture serve as adjunct faculty. PHM House Officers are encouraged and expected to interact closely with PHM faculty in preparation for courses and seminar, and involvement in teaching, research, clinical service, and extension-engagement activities.

**GENERAL**

The PHM House Officer’s primary responsibility will be to complete the curriculum requirements that will be provided. Details of the curriculum and plan of graduate study will be discussed with Dr. Martin. House Officers will also participate in the teaching, research, clinical service, and extension-engagement programs of the PHM faculty. A primary goal of this training program is to prepare PHM House Officers for certification by the American College of Poultry Veterinarians (ACPV). This requires submission of the ACPV application and supporting materials by 2nd year House Officers by either October 1st, November 1st or December 1st (dependent on the deadline set by the ACPV). Successful credentialing at that time will enable House Officers to sit for the ACPV examination in July of the following calendar year. Progress in the PHM House Officer program will be managed and evaluated relative to meeting ACPV credentialing requirements.

**SPECIFIC**

1) **CLINICAL ACTIVITIES**

House Officers will contribute to the clinical services activities of the PHM program through involvement with clients, diagnostic investigations and problem solving, development of health recommendations, clinical research studies, and interaction with various diagnostic laboratories. These activities will require House Officers to maintain records of clinical activities so that faculty and future House Officers can follow up on cases. Publication of case reports and/or clinical studies are necessary to meet the credentialing requirements for the American College of Poultry Veterinarians.

In addition to clinical teaching and service activities with the PHM faculty, each House Officer will also spend time working with adjunct faculty at commercial broiler, turkey, and table egg production facilities. Additional field experience may be provided through the North Carolina Department of Agriculture Animal Disease Diagnostic Laboratories, United States Department of Agriculture, and NCSU Poultry Extension Service.

2) **COURSE WORK, SEMINARS, FEES, AND MSpVM REQUIREMENTS**

MSpVM students must attend lectures, seminars, and courses that are agreed on by the Advisory Committee and specified in the Plan of Graduate Work and PHM curriculum. House Officers may also wish to participate in the NCSU, CVM Student Chapter of the American Association of Avian Pathologists (CVM Poultry Club).

MSpVM students will register for Fall and Spring semesters according to their Plan of Graduate Work. **Registration Fees** (tuition) are paid by the CVM Graduate Program. **Student Fees** are currently paid by the student. Each semester PHM MSpVM students will receive an invoice for Student Fees. It is the responsibility of each MSpVM pay for these fees. The MSpVM is a non-thesis Masters degree. Requirements include a Plan of Graduate Work consistent with the degree program and approved by the Advisory Committee, satisfactory completion of the Plan, and an oral exam (a Graduate School requirement). It is the MSpVM student’s responsibility to submit the Plan of Graduate Work to the Student Services Office. It is also the MSpVM student’s responsibility to submit the Request for Oral Exam at the beginning of the last semester of study. The oral exam requirement is accomplished by the cumulative satisfactory
performance of seminars and presentations as well as completion and presentation of several mock clinical cases to the advisory committee. Oral examination must be completed before the beginning of April of the second year of the residency.

3) SEMINARS, RESEARCH AND WRITTEN REPORTS

Presentation of 2 in-house seminars as part of the House Officer Seminar series is required. Three publication quality manuscripts, either case reports or research-based, (drafts due March and completed manuscripts due June of the House Officer's second year) are required to complete the program. House Officers are expected to have or develop proficiency in digital photography and image editing, word processing (Word), spreadsheet (Excel), presentation (PowerPoint), and database management skills.

PHM House Officer/MSpVM students will choose research projects depending upon interest based on consultations with and approval of PHM faculty. Dr. Gimeno will coordinate research activities. A PHM faculty member must be clearly identified with each new research project or clinical case write up and will supervise the project. It is important that House Officer/MSpVM student activities and time commitments be communicated to and coordinated with all participating faculty.

4) POULTRY HEALTH MANAGEMENT ROUNDS/SEMINAR (SVM 602)

PHM Rounds/Seminars are held at Noon each Monday in the PHM conference room (C-330). House Officers are required to attend, and will actively participate in discussions and make at least two presentations approximately 30 minutes in length each semester on their current research, field projects, current literature topics, or specific topics of interest. Oral reports of the TAU will also be made by the 1st year House Officer during PHM Rounds. Dr. Fletcher coordinates the course and presentations and Dr. Martin is responsible for coordination of TAU reports. Dr. Fletcher must be informed of the topic 1-2 weeks in advance and the topic will be announced at the Rounds prior to the one at which the presentation will be made. Topics for presentation should be contemporary and of interest to both the House Officer and those attending. Experiences during the program, including recent cases, topics or issues in the poultry industry, clinical research studies, or faculty activities provide good subjects for presentations. House Officers are encouraged to consult with PHM faculty and use resources of the CVM to prepare their presentations.

5) POULTRY HEALTH HISTOPATHOLOGY ROUNDS

PHM histopathology rounds are held on Wednesdays from 10am-12pm in C-330 and are headed by Drs. John Barnes, Oscar Fletcher, and Tahseen Aziz. House Officers are required to attend these sessions when possible given the rest of their activities. During these rounds, House Officers will become more familiar with normal histopathology interpretation, histopathological diagnosis, and current disease problems affecting avian species.

6) TEACHING RESPONSIBILITIES

House Officers will participate in the clinical and didactic instruction of the PHM faculty. These responsibilities may include but are not limited to 1) participation in veterinary student clinical rotations (VMP 982, VMP 983 Advanced Poultry Health Management I and II & VMP 974 Food Supply Veterinary Medicine) including instruction in poultry anatomy, diagnostic techniques, necropsy, and farm evaluation and 2) attendance and participation as possible in VMP 401 and 964 including presenting lectures and helping with instruction of laboratories, and 3) participation and assistance in classes, laboratories and production courses (VMB 913 and VMP 916, 936, 956, and 971) offered by PHM faculty. Teaching requirements of the Residency/Master’s programs will be fulfilled through these contributions.

7) TEACHING ANIMAL UNIT

House Officers are responsible for veterinary oversight of the turkey and broiler flocks produced in the CVM Teaching Animal Unit (TAU). The 1st year House Officer will have primary veterinary responsibility for each flock including reporting results in oral (PowerPoint) presentations at PHM
Rounds and in a final written report (summarizing production, mortality, diagnostics, and processing data). The 2nd year House Officer will assist and serve as an informational resource for the 1st year House Officer. Dr. Martin and Dr. Wages will provide direct supervision of House Officer TAU responsibilities and activities. Dr. Martin, Barnes or Wages will provide assistance with necropsy of TAU mortality.

8) SCIENTIFIC MEETINGS AND EXTERNSHIPS

Participation in scientific conferences, poultry industry meetings, and clinical externships provides PHM House Officers with valuable educational experiences and contact with poultry industry personnel and is strongly encouraged. Meetings usually attended include: National Poultry Health and Processing Meeting, Southern Conference of Avian Disease/International Poultry Expo, AVMA/AAAP, North Carolina Poultry Veterinarians Meeting, and in-state poultry producer conferences. Discussion of past externship opportunities with the PHM faculty and past residents is encouraged.

The amount of time and funding available for approved externships and meetings is variable depending on existing PHM budget and specific interests of the House Officer. The PHP Department may also provide each PHM House Officer with an annual travel allowance pending budgetary availability. All travel plans for meetings, conferences, and externships must be requested by the House Officer in writing and approved by Dr. Martin or Dr. Wages (general travel authorization will need to be made by the Population Health and Pathobiology department chair as well). The forms necessary for pre-and post-travel are: Request, Travel Authorization, Student Evaluation, Mentor Evaluation (as applicable), and Reimbursement (as applicable). All records of travel expenses must be kept by the House Officer for submission to the PHP Department for reimbursement (as applicable) and copies submitted to Dr. Martin. House Officers are expected to 1) plan for the judicious use of funds available for travel and field experiences, 2) maintain records of expenditures and 3) submit on a timely basis (2 and 3 weeks in advance for in-State and out-of-State travel, respectively) Travel Authorization forms for all overnight stays. Externships are usually taken at the end of the 2nd year of Residency require approval from Dr. Martin.

Travel Authorization forms must be completed whether or not overnight travel results in cost to the University. It is the House Officer’s responsibility to submit original travel authorizations to the PHP Dept. Office Assistant and submit copies to the Clinical Coordinator, Dr. Martin.

OTHER ADMINISTRATIVE RESPONSIBILITIES

A) EVALUATIONS
House Officers will meet with the Advisory Committee for evaluation of their progress two times during the year. House Officer evaluation forms will be submitted to the Faculty Committee on House Officer Programs (FCHOP) by Nov. 1 and April 1 of each year during the PHM Residency. By April 1st of the House Officer’s second year, the Advisory Committee will recommend for or against awarding a Certificate of Completion to each PHM House Officer. Additionally, PHM MSpVM students must meet the academic performance requirements of the NCSU Graduate School. There may be exit interviews with the Advisory Committee, PHP Department Head, and FCHOP for PHM House Officers to summarize their impressions of the program and suggest changes/improvements.

B) VACATION
Twelve days of vacation are available each year and must be taken before June 1 of the House Officer’s second year. Prior to taking vacation, PHM House Officers will submit Annual Leave forms to the Clinical Coordinator (Dr. Martin) for approval.

C) ANIMAL CARE AND USE
PHM House Officers must comply with the ‘Principals for the Use of Animals’ document
All Principal Investigators (as indicated on the AVAU) must be certified (successful completion of the examination) before the Application for Vertebrate Animal Use AVAU can be approved; PIs must be re-certified at least every three years after initial certification. All NCSU personnel who work unsupervised with experimental animals must be certified prior to performing animal manipulations and at least every three years thereafter. The process in each case is initiated by contacting the LAR office (CVM room A234; 513-6280; laroffice@ncsu.edu), which will provide a packet of material containing instructions for completing the training and an examination to be returned to the LAR office. The examination will be graded, and the individual, and the IACUC office, notified of successful completion (80% correct answers). The actual training will involve a series of internet sites selected to satisfy the specifically required topical areas. Personnel will be directed to sites that have sufficient information to successfully complete the exam, as well as links for more information. Because this basic training includes institution-specific information, completion of training at another institution may not substitute for NCSU certification.

**PLAN OF GRADUATE WORK**

The Plan of Graduate Work (curriculum) is intended to serve as a functional framework for the purposes of planning and organizing PHM training experiences for each MSpVM student’s individual benefit, and to maintain efficient operations at the CVM. Functioning within this framework is expected to be dynamic based on developing opportunities and individual priorities of each MSpVM student. This system can work to everyone’s benefit if timely and clear communications are maintained among those involved.

Meetings of the Advisory Committees and House Officer/MSpVM students will be held to evaluate and adjust as necessary the curriculum and priorities of activities.

**POULTRY HEALTH MANAGEMENT RESIDENCY ADVISORY COMMITTEE**

**MASTER OF SPECIALIZED VETERINARY MEDICINE GRADUATE COMMITTEE**

- Dr. Tahseen Aziz, **ACP** (NCDA&CS)
- Dr. H. John Barnes, ACVP, **ACP** (NCSU CVM)
  * Dr. Luke Borst (NCSU, CVM)
- Dr. Donna Carver **ACP** (NCSU Poultry Extension Service)
- Dr. Oscar Fletcher, ACVP, **ACP** (NCSU CVM)
- Dr. Isabel Gimeno, **ACP** (NCSU CVM)
- Dr. James Guy, ACVM, **ACP** (NCSU CVM)
  * Dr. David Ley, ACVM, **ACP** (NCSU CVM)
  * Dr. Michael Martin (Chair), **ACP** (NCSU CVM)
- Dr. Jo Anna Quinn, **ACP** (USDA)
- Dr. Dennis Wages

* Represents core committee members with signature authority