

ACPV Application for Emeritus Membership

Name: Dr. Lloyd D. Keck

Address:

20772 Bugscuffle Rd
West Fork, Arkansas 72774
United States

Email: kecklloyd@gmail.com

Phone: (479) 422-2929

Birthplace: Prairie Grove, Arkansas

Birth date: 10/27/1956

Citizenship/Permanent Residency: United States

Additional Information

How long have you been a member of ACPV?: 20

Resume of your experience in avian medicine:

(Recent positions, please give employer name, title, type of work and years spent)

See below.

What are you doing now?:

Retired.

Other Comments:

CURRICULUM VITAE

Lloyd D. Keck, DVM; ACPV
PO Box 543
West Fork, AR 72774
(479) 761-3246 (h)/(479) 422-2929 (c)
lkeck@pgtc.com

EDUCATION AND CERTIFICATIONS

- 1992 Diplomate (by examination) in the American College of Poultry Veterinarians
- 1986 UNIVERSITY OF ARKANSAS, Fayetteville, AR
Ph.D. candidate
- 1978-1982 LOUISIANA STATE UNIVERSITY, Baton Rouge, LA
School of Veterinary Medicine
Degree: Doctor of Veterinary Medicine (with Honors)
- 1974-1978 UNIVERSITY OF ARKANSAS, Fayetteville, AR
Honor Graduate – Nutrition
Degree: Bachelor of Science in Agriculture

EXPERIENCE

- 2011-Present **ZOETIS, INC., ANIMAL HEALTH DIVISION OF PFIZER**, Raleigh, NC
Position: Senior Technical Services Veterinarian
Following a contractual relationship with Pfizer, Dr. Keck joined as an employee. This position is the primary veterinary support of Pfizer/Zoetis products and services to the animal health industry in the United States. Responsibilities include participating as a team member with pharmaceutical product development and licensing processes., strategy for product development, market assessment, applied clinical trials protocol development and data collection. This position communicates the technical and economic rationale of disease control strategies, vaccination, vaccination programming, medication and other services provided by the company inside and outside Zoetis. Dr. Keck provides client training and knowledge of vaccines, animal health programs, injectable anti-infectives, medicated feed additive, responsible use of antibiotics, animal welfare care, and caregiver programs and

poultry production. Assists in preparation of and delivery of technical presentations to a wide range of audiences. Serves as a scientific and technical advisor to clients and produces scientific publications. Participates as a research scientist. Develops and standardizes experimental design protocols for various types of studies. Understands laboratory methods and processes.

2006-2007

CONGRESSIONAL FELLOW, Washington, DC

In August 2006 Dr. Keck moved to Washington DC after accepting a Congressional Fellowship offered by the American Association for the Advancement of Science (AAAS). Competitive Fellowships are awarded to individuals with demonstrated excellence in scientific and engineering fields. Fellowships educate participants on federal policymaking, foster exchange between scientists and Congress, provide opportunities to conduct policy research that addresses societal challenges, and increase the involvement and visibility of the "scientific approach" to public policy. Dr. Keck is the only AAAS Fellow to work as a fellow in the U.S. House of Representatives and the U.S. Senate. He worked for members of the House Armed Services Committee and the Senate Agriculture Committee where he focused on the rewrite of the Farm Bill including international trade food safety and funding for WIC and the school lunch program.

1996 - Present

KECK & ASSOCIATES, West Fork, ARPosition: Owner

Poultry management and technical services consulting service. Contract service is provided to U.S. as well as international poultry and pharmaceutical companies including Merck, Pfizer, Beecham-Smith Kline and Sonofi (Boehringer Ingelheim.) Service includes establishment of poultry health maintenance programs for major integrators. Provide technical support for biologic and pharmaceutical companies. Design and implement training programs for service personnel. Field trial testing of products for allied industries, as well as integrators. U.S.D.A. correlation and consultation services. Nutritional consultation provided as well as federal regulation compliance. International export support created a significant percentage of revenue.

2001-2004

AVIAN PERFORMANCE STANDARDS, INC., West Fork, ARPosition: Owner

Dr. Lloyd Keck and Dr. Greg Rennie established A.P.S.I. in 2001. The business consisted of a unique benchmarking database designed to general comparative data between broiler integrators. In addition to the normal variables you would expect in a database, A.P.S.I. included a complete spectrum of avian health parameters not available in any commercially available system. A.P.S.I. collected data from 53 million

broilers per month, from 13 different programs located in Arkansas, Alabama, and Georgia. The business was sold in 2004.

1993-1996

SIMMONS FOODS, Siloam Springs, ARPosition: Director of Technical Services/ Live Production Management Team Member

Responsible for direction and management of three corporate departments: Quality Assurance – Live Production, Technical Services and Laboratory Services. Responsibilities included budget management, recruitment, long range planning, and applied research and training. Facilitation required interaction at all levels of production and management, expertise in disease diagnostic, residue analysis, experiments design, and human resources.

1989-1993

ARKANSAS LIVESTOCK AND POULTRY COMMISSION, Springdale, ARPosition: Poultry Health Specialist

This position involved interacting with poultry industry personnel to provide technical support for field disease problems including diagnostic, epidemiology, prevention and control throughout Arkansas and adjacent areas. Others responsibilities included providing written technical information, applied research projects, and designing, monitoring and instituting preventative health programs. Much of this was facilitated by working closely with poultry integrator management, university personnel, and other governmental agencies. A standardized hatchery microbiological monitoring program was developed and incorporated by several poultry integrators.

1987-1989

ARKANSAS LIVESTOCK AND POULTRY COMMISSION, Springdale, ARPosition: Laboratory Directory

Responsible for the operation of a state operated veterinary diagnostic laboratory. Responsibilities included budget preparation, personnel acquisition and supervision, planning, public and client relations, and scientific work. Technical staffing consisted of persons possessing three D.V.M.'s, two PhD.'s and five Master degrees. Scientific work involved toxicology, pathology, microbiology and serological diagnostics consisting of over 1,000 case submissions monthly.

1984-1987

ARKANSAS LIVESTOCK AND POULTRY COMMISSION, Little Rock, ARPosition: Veterinary Laboratory Diagnostician

Primary responsibilities were gross and microscopic pathology occupying about 60 percent of the workday. Annual case load was approximately 300 large animal and 400 small animal necropsies. In addition, about 4,000 cases were evaluated histologically annually. Secondary responsibilities involved the supervision of approximately 10 percent of

the total work. Proficiency in all aspects of veterinary diagnostic including bacteriology, virology, toxicology, immunology and clinical pathology was required. The remaining 30 percent of the time involved poultry diagnostics consisting of field work, gross and microscopic pathology and other avian disease testing.

- 1983-1984 **INTOX LABORATORIES, INC.**, Little Rock, AR
Position: Animal Facility Director
Responsibilities included long range management and budget of facility, producing written standard operation procedures, insuring that the facility met federal regulations, training and supervision of 11 animal husbandry technicians, health-microbiological-pathological surveillance of rodent and rabbit breeding colonies. Research activities included artificial insemination of rabbits, lethal dose 50 studies, feed trials and rabbit teratology studies.
- 1983-1985 **WEST FORK VETERINARY CLINIC**, West Fork, AR
Position: Owner
Built, operated and maintained a private animal hospital as a managing partner. In addition to routine capabilities, embryo transfer services were provided.
- 1982-1983 **LINCOLN VETERINARY CLINIC**, Lincoln, AR
Position: Private Practitioner
Engaged in 60 percent large animal and 40 percent small animal practice. Major emphasis was placed on reproductive her health program for area dairy farmers. Special practice interest included small ruminants, reproduction, laboratory diagnostics, and surgery.
- 1979-1980
(Academic Year) **LOUISIANA STATE UNIVERSITY**, Baton Rouge, LA
Department of Microbiology and Parasitology
Position: Parasitologist's Assistant
Involved with clinical investigation of the efficiency of Ivermectin (Merck) against equine nematodes. Also worked in tissue culture laboratory maintaining cell lines for virus cytopathology.
- 1980
(Summer) **VALMAC INDUSTRIES** (Now Tyson), Russellville, AR
Position: Assistant to Company Veterinarian and Poultry Pathologist
Conducted examination of post-vaccination serum titers in broiler and broiler breeder, performed necropsies in field outbreaks, exposed to processing plant management and computer ration formulation. Conducted independent investigation into temperature-humidity stress in commercial poultry.

1976-1979

WITHROW SPRINGS STATE PARK, Huntsville, AR

Position: Park Naturalist/Ranger

Conducted outdoor educational seminars for park visitors, supervised summer employees, constructed three hiking trails listed in the Arkansas Trails Register, established a guided canoe float and canoe rental program, wrote weekly newspaper column.

ORGANIZATIONS AND HONORS

Selected as a Watt Poultry USA Top Gun industry problem solver
Past President, Arkansas Poultry Veterinarians Association
Past President, NW Arkansas Veterinarian Medical Association
Member Phi Zeta Veterinary Scholastic Society
Member of Who's Who in Veterinary Science and Medicine, 1st Edition
Member Executive Council, American Association of Laboratory Animal Science, Ark Branch
American Association of Avian Pathologists
American Veterinary Medical Association
Dean's Honor List – Louisiana State University
Alpha Zeta Honorary Fraternity for Agriculture
Farmland Industries – Outstanding Senior Award
Unions Programs Outdoor Recreation Commission (University of Arkansas)
Dean's List – University of Arkansas
Outstanding Young Men of America

VOLUNTEER, COMMUNITY SERVICE, FOREIGN CONSULTING

Invited Consultant – Russian and Ukraine
Invited Consultant - United Kingdom, Foot and Mouth Disease Eradication Program
Invited Consultant - Venezuela
Invited Consultant - Peru
Invited Consultant - Hong Kong
Invited Consultant - Thailand
Invited Consultant - Philippines
Invited Overseas Consultant – Brazil
Invited Overseas Consultant – Indonesia
Invited Overseas Poultry Consultant to Sao Tome (Africa) and VOCA
County Commissioner, Washington County, Arkansas
Board Member, Wedington Fire Department
Board Member, Community Pre-School
Board Member, Friends of Lake Wedington
1986 Technical Advisor for Establishment of Swine Production Unit, Pignon, Haiti Chariman
AALAS Annual Meeting Winrock Farms – Use of Small Ruminants in Research
Girls Scouts of America – North Arkansas Camp

PUBLICATIONS, PAPERS, SPEAKING ENGAGEMENTS, TRAINING

SELECTED PUBLICATIONS

Keck, L.D. et al

“Effect of Different Levels of Maternally Derived Antibodies on Protection Against Infectious Bursal Disease Virus.” Avian Diseases

Poultry Digest. New method to assess hatching egg shell quality.

Keck, L.D. et al

“Antibody Detection in Matched Chick Sera and Egg Yolk Samples by Commercial ELISA.” Avian Diseases

“Coccidiosis Control: Monitoring is Essential” published by Sterwin Laboratories.

“Correlation of Gross and Smear Preparation Microscopic Findings in Eimeria acervulina Infected Chickens.” Senior author. Poster presentation at the AVMA 128th Annual Meeting, Seattle WA.

“ A Comparison Study of Antibody Titer for Bordetella avium as determined by ELISA and Microagglutination from Sera Submitted to a Poultry Diagnostic Laboratory.” AVMA annual meeting, Orlando, FL .

“Carbofuran Toxicosis in Cattle: Case History and Analytical Method,” Veterinary and Human Toxicology, Vol. 27, Number 5.

“Mycotoxicosis: A General Review,” published by CEVA Laboratories.

“Eperythrozoonosis in Miniature Swine,” abstract presented at Meeting of American Association for Laboratory Animal Science, Cincinnati, OH.

“Vagino-Cervical Prolapse in a Pony Mare,” Veterinary Medicine Small Animal Clinician.

“The Use of Molasses, Woods Molasses and Raw Sugar in Poultry Rations” graduate paper.

“An Evaluation of the Bacteriocidal Effects of 0.3 and 0.6 percent Phenol and Formalin and their Application in a Simplified Quantitative Approach to the Production of Autogenous Bacterins.”

SPEAKING

Invited Speaker for Arkansas Poultry Symposium, Springdale, AR
“Poultry Medications: Current Usage Status, New Drug Updates, Regulatory Updates”

Invited Speaker for Arkansas Poultry Symposium,, Springdale, AR
“Using Field-Based Information to Develop Broiler Vaccination Programs”

Invited Speaker for Arkansas Poultry Symposium, Springdale, AR
“Hatchery Quality Assurance Programs and their Relationship to Production”

Invited Speaker for Arkansas Poultry Symposium, Fayetteville, AR
“A New Method to Assess Shell Quality and Hatchability”

Invited Speaker for Southeastern Poultry Health Seminar. Atlanta, GA

Invited Speaker for A.L. Laboratories Poultry Veterinarian Technical Training Seminar, Tampa, FL

Invited Speaker for Arkansas Poultry Symposium, Springdale, AR
“Hatching Egg and Chicken Quality”

Invited Speaker for SmithKline National Poultry Technical Sales Training

Invited Speaker for Arkansas Poultry Federation Annual Symposium, University of Arkansas Center for Continuing Education. “Infectious Laryngotracheitis in Arkansas – Five Years of Experience 1985-1990”

Invited Speaker for National Meeting on Poultry Health and Condemnations, Ocean City, MD.
“Laryngotracheitis: Arkansas’ Experience”

SPECIAL TRAINING

Seminar on Avian Histopathology presented by Craig Riddell at the AVMA 126th Annual Meeting, Orlando, FL .

Completed the Foreign Animal Diseases Program for University and Laboratory Personnel at the USDA-APHIS Plum Island, NY Laboratory.

Foot and Mouth Disease eradication program, United Kingdom.

National Food Safety Inspection Service Correlation, Ames, Iowa.

US Animal and Plant Inspection Service Avian Influenza, Incident Command, Harrisburg, VA.

ACPV Application for Emeritus Membership

Name: Dr. David A. Pyle

Address:

2650 Pebble Ct

Zeeland, Michigan 49464

United States

Email: dapyle@charter.net

Phone: (616) 403-4589

Birthplace: Zeeland, MI

Birth date: 3/3/1953

Citizenship/Permanent Residency: United States

Additional Information

How long have you been a member of ACPV?: 25

Resume of your experience in avian medicine:

(Recent positions, please give employer name, title, type of work and years spent)

See below.

What are you doing now?:

Traveling with my wife, spending more time at my north woods cabin, and more time with grandchildren. I am occasionally doing poultry welfare audits.

Other Comments:

DAVID ALAN PYLE, D.V.M., A.C.P.V.

2650 Pebble Court
Zeeland, MI 49464
616.403.4589
dapyle@charter.net

PROFESSIONAL EXPERIENCE

DAVID A. PYLE, D.V.M., PLLC, Poultry Veterinary Consulting 2004-Present

Consulting poultry practice with integrated poultry companies in areas of poultry health, farm management, condemnation reduction at processing, and animal well being.

BAYER HEALTH CARE, LLC, Shawnee, KS 1997 – 2004

Senior Professional Services Veterinarian- Poultry

Provided veterinary technical support to sales staff and customers, including diagnostic and problem solving for customers. Set-up field trials and gave technical presentations and seminars. Sales responsibility added.

- Evaluated and implemented product use procedures for major poultry company to eliminate product failures and improve customer satisfaction.
- Wrote several product technical bulletins to improve sales and meet customer needs.
- Planned and launched new fly control product which resulted in first year sales exceeding expectations by 20%.
- Exceeded sales goals every year by 5-20%.
- Prepared scientific information to defend Baytril Poultry against the FDA's legal action.

SARA LEE CORPORATION, Zeeland, MI 1977 – 1997
Bil Mar Foods Division

Executive Director of Corporate Farms 1988 - 1997

Reported directly to President/CEO. All areas of live production in MI and IA, including feed mills, live haul and support staff.

- Increased number of birds from 6 to 16 million per year.
- Added eight company owned farms and 25 contract farms.
- Completed building projects on-time and under budget.
- Managed annual budget greater than \$20 MM.
- Interacted with senior management to match production to sales requirements.

Staff Veterinarian 1977 - 1988

Managed all company turkey health programs in three states.

- Developed biosecurity program for company farms.
- Set-up company microbiology and serology lab.
- Reduced processing plant condemnation rates by 5%.
- Reorganized turkey procurement and placement procedures reducing costs by 5%.

FOREST HILLS VETERINARY CLINIC 1976 – 1977

Associate Veterinarian

Staff veterinarian – Mixed practice.

EDUCATION

Michigan State University, College of Veterinary Medicine, East Lansing, MI
Doctor of Veterinary Medicine, 1976
Michigan State University, East Lansing, MI
Bachelor of Animal Science, 1972

State Veterinary Licenses

Michigan, Wisconsin, Minnesota, Indiana, Illinois, and Iowa

PROFESSIONAL ASSOCIATIONS

Member of American Veterinary Medical Association
Member of American Association of Avian Pathologists
Member of Midwest Association of Avian Veterinarians
Member and Past President of Association of Veterinarians in Turkey Production
Member of Veterinarians in Egg Production

PROFESSIONAL ACTIVITIES

Board Certified, Diplomate, American College of Poultry Veterinarians
Professional Animal Auditor Certification Organization, Foundation Auditor, represented AAAP
on the PAACO Board of Directors 2010-2022
Member of Michigan Department of Agriculture Avian Emergency Disease Task Force
Member and past President, Michigan Allied Poultry Industries
Member and past board member National Turkey Federation
Member of Michigan Farm Bureau Task Force on Agricultural Non-point Pollution
Member of committee, Michigan Department of Agriculture and M.S.U. to draft Michigan
“Generally Accepted Agricultural and Management Practices for Broilers,
Turkeys and Game Birds.”
Participant of Antibiotic Use in Animal Agriculture Advisory Work Group,
Minnesota Department of Health
USDA APHIS NPIP state delegate

ACPV Application for Emeritus Membership

Name: Dr. Frank W. Pierson

Address:

603 Wellwater Ave.

Durham, North Carolina 27703

United States

Email: rkzsld@gmail.com

Phone: (540) 235-2326

Birthplace: Baltimore

Birth date: 5/3/1956

Citizenship/Permanent Residency: United States

Additional Information

How long have you been a member of ACPV?: 28

Resume of your experience in avian medicine:

(Recent positions, please give employer name, title, type of work and years spent)

See below.

What are you doing now?:

Part-time instruction at Virginia Tech, Lincoln Memorial University.

Other Comments:

I am no longer providing clinical services.

Curriculum Vitae

FRANK WILLIAM PIERSON



PERSONAL INFORMATION

Date of Birth: May 3, 1956
Place of Birth: Baltimore, MD
Father: Frank Christian Pierson, deceased
Mother: Mildred Katherine Pierson (nee Mündle), deceased
Marital Status: Married
Wife: Mary Ellen Louise Pierson (nee Mezalick)
Children: Rachael Kohl Zahn (nee Pierson), Sarah Louise Duff (nee Pierson)

Residence: 603 Wellwater Avenue, Durham, NC 27703
Personal / Home Tel: 540-235-2326

EDUCATION

- B.S.** 1978, Dual major in animal science and agricultural education, University of Delaware, Newark, DE.
- M.S.** 1980, Emphasis in avian physiology, Department of Animal Sciences, Purdue University, West Lafayette, IN.
- D.V.M.** 1984, Virginia-Maryland Regional College of Veterinary Medicine, Virginia Polytechnic Institute and State University, Blacksburg, VA.
- Ph.D.** 1993, Emphasis in veterinary microbiology and immunology, Virginia-Maryland Regional College of Veterinary Medicine, Virginia Polytechnic Institute and State University, Blacksburg, VA.
- Diplomate** 1994, American College of Poultry Veterinarians.

POSITIONS HELD

1974 (summer): Laborer, Bethlehem Steel Corporation, Sparrows Point, MD.

1975 (summer): Veterinary Assistant, (Dr. John Fowble - Equine), Timonium, MD.

1976 (summer): Veterinary Assistant, Towson Veterinary Hospital (Employer: Dr. J. Burton / Dr. G. Hauptman - Small Animal), Towson, MD.

1977 (summer): Farm Hand, Labadie Mill Farm (Thoroughbred), Middletown, MD.

1977-1978: Teaching Assistant, Anatomy and Physiology (Supervisor: Dr. P. Sammelwitz), Department of Animal Science and Agricultural Biochemistry, University of Delaware, Newark, DE.

1978 (summer): Boiler Handyman, Bethlehem Steel Corporation, Sparrows Point, MD.

1978-1980: Graduate Research Assistant (Advisor: Dr. Scotti Hester), Department of Animal Sciences, Purdue University, West Lafayette, IN.

1981-1983 (part-time and summers): Laboratory Assistant (Employer: Dr. Fred Troutt, Department of Urban and Agricultural Practice, Virginia-Maryland Regional College of Veterinary Medicine, Blacksburg, VA.

1984-1987: Associate Veterinarian (Employer: Dr. E. Swartz - Small Animal, Avian, Exotic), Londonderry Animal Hospital, Middletown, PA and Elizabethtown Animal Hospital, Elizabethtown, PA.

1987-1990: Graduate Research Assistant (PhD Advisor: Charles Domermuth); Department of Large Animal Clinical Sciences, Virginia-Maryland Regional College of Veterinary Medicine, Virginia Polytechnic Institute and State University, Blacksburg, VA.

1990-1991: Research Associate, non-tenure track; Department of Large Animal Clinical Sciences, Virginia-Maryland Regional College of Veterinary Medicine, Virginia Polytechnic Institute and State University, Blacksburg, VA.

1991-1993: Research Scientist, non-tenure track; Department of Large Animal Clinical Sciences, Virginia-Maryland Regional College of Veterinary Medicine, Virginia Polytechnic Institute and State University, Blacksburg, VA.

1993-1999: Assistant Professor, Avian Medicine (tenure track); Department of Large Animal Clinical Sciences, Virginia-Maryland Regional College of Veterinary Medicine, Virginia Polytechnic Institute and State University, Blacksburg, VA.

1999-2011: Associate Professor, Avian Medicine / Biosecurity and Infection Control, (tenured); Department of Large Animal Clinical Sciences, Virginia-Maryland Regional College of Veterinary Medicine, Virginia Polytechnic Institute and State University, Blacksburg, VA.

1994-96, 2002-04, 2005-06: Adjunct Assistant/Associate Professor; Virginia-Maryland Regional College of Veterinary Medicine (Maryland Campus), University of Maryland, College Park, MD.

2001-2018: Hospital Biosecurity Coordinator / Infection Control Officer, Virginia-Maryland Regional College of Veterinary Medicine, Virginia Polytechnic Institute and State University, Blacksburg, VA.

2007-2008: Interim Director; Veterinary Teaching Hospital, Virginia-Maryland Regional College of Veterinary Medicine, Virginia Polytechnic Institute and State University, Blacksburg, VA.

2007-2014: Director, Continuing Education, Virginia-Maryland Regional College of Veterinary Medicine, Virginia Polytechnic Institute and State University, Blacksburg, VA.

2008-2014: Director, Veterinary Teaching Hospital, Virginia-Maryland Regional College of Veterinary Medicine, Virginia Polytechnic Institute and State University, Blacksburg, VA.

2011-2018: Professor, Biosecurity and Infection Control, Clinical Specialist, Poultry Health, Department of Population Health Sciences, Virginia-Maryland Regional College of Veterinary Medicine, Virginia Polytechnic Institute and State University, Blacksburg, VA.

2016-2018: Interim Department Head, Department of Biomedical Sciences and Pathobiology, Virginia-Maryland College of Veterinary Medicine, Virginia Polytechnic Institute and State University, Blacksburg, VA.

2018-Present: Professor Emeritus, Biosecurity and Infection Control, Clinical Specialist, Poultry Health, Department of Population Health Sciences, Virginia-Maryland Regional College of Veterinary Medicine, Virginia Polytechnic Institute and State University, Blacksburg, VA.

2021-Present: Adjunct Professor, College of Veterinary Medicine, Lincoln Memorial University, Harrogate, TN.

AWARDS AND HONORS

1978: Who's Who Among Students in American Colleges and Universities.

1979: Certificate of Excellence for Graduate Research Presentation, Poultry Science Association.

1980: Gamma Sigma Delta, Honor Society of Agriculture.

1980: Phi Kappa Phi, National Honor Society.

1984: Phi Zeta, Honor Society of Veterinary Medicine.

1988: First Place, Graduate Research Award Competition, Virginia-Maryland Regional College of Veterinary Medicine.

1991: Sigma Xi, Scientific Research Society.

1992: College Teaching Award, Virginia-Maryland Regional College of Veterinary Medicine.

1992: Certificate of Teaching Excellence, Virginia Polytechnic Institute and State University.

1995, 1996: Nominated, College Teaching Award, Department of Large Animal Clinical Sciences, Virginia-Maryland Regional College of Veterinary Medicine.

1998: Recognized for research contributions in the area of poultry health, Distinguished Professors, Division of Research and Graduate Studies, Virginia Polytechnic Institute and State University,

2007: Recognized as "Scholar of the Week" for scholarly activity in the area of poultry diseases and agricultural vulnerability / risk assessment, Office of the Vice President for Research, Virginia Polytechnic Institute and State University,

2011: Recognized as "Scholar of the Week" for research in the area of poultry diseases, agroterrorism, biosecurity, disaster response and recovery; Office of the Vice President for Research, Virginia Polytechnic Institute and State University

2013: Chief James D. Fox Award for Law Enforcement Excellence (discretionary), in appreciation for commitment to the law enforcement community (working dog program, VTH), Newport News Police Department, Newport News, Virginia.

2015: Virginia M. and Edward E. Thompson Award “which recognizes a full-time faculty member whose life embodies the high standards of professionalism and the humanitarian values of Dr. Edward E. Thompson. The recipient shall have made significant, creative contributions to the advancement of veterinary medicine”.

2015: Nominated, Alumni Award for Excellence in Graduate Academic Advising, Virginia Polytechnic Institute and State University.

2017, 2018: Nominated, Alumni Lifetime Achievement Award, Virginia Maryland College of Veterinary Medicine, Virginia Polytechnic Institute and State University.

2019: Member Emeritus, Northeastern Conference on Avian Diseases, in appreciation for years of service, presented at the 91st NECAD meeting, Pennsylvania State University, State College PA.

2022: Bruce W. Calnek Applied Poultry Research Achievement Award, American Association of Avian Pathologists, Philadelphia, PA – The Bruce W. Calnek Achievement Award is given to a member of AAAP who has made outstanding research contributions resulting directly or indirectly in a measurable, practical impact on the control of one or more important diseases of poultry.

ORGANIZATIONAL MEMBERSHIPS

1984-Present: American Veterinary Medical Association.

1984-Present: Phi Zeta

1988-Present: American Association of Avian Pathologists.

1992-2016: Association of Avian Veterinarians.

1978-1980, 1993-2018: Poultry Science Association.

1993-2018: Northeastern Conference on Avian Diseases

1994-Present: American College of Poultry Veterinarians

1998-2018: Virginia Veterinary Medical Association.

2002-2005: National Alliance for Food Safety and Security

2004-2018: American Association of Veterinary Clinicians

2005-Present: Veterinary Infection Control Society

2007- 2015: Maryland Veterinary Medical Association,

2008–2015: West Virginia Veterinary Medical Association

2021-Present: Virginia Public Health Association

VETERINARY LICENSURES AND CERTIFICATIONS

Maryland, License # 2771, 1984-2016 (allowed to expire).

Virginia, License # 0301201977, 1997-Present.

Pennsylvania, License # BV-005656-L, 1984-1991 (allowed to expire).

Federal Accreditation, USDA / Pennsylvania, 1984-1987.

Certificate, Human Participants Protection Education for Research Teams (NIH), 2002.

Credentialed, Virginia Emergency Response Team, training / Web EOC, Virginia Department of Emergency Management, Emergency Operations Center - ESF-11, 2006.

Certificate, Agriculture and Food Vulnerability Assessment Training Program, University of Tennessee, Center for Food Safety and Security / U.S. Department of Homeland Security, 2006.

Certificate, Preparedness and Response to Food and Agriculture Incidents Management and Planning Level (16 Contact Hours). National Integration Center, Federal Emergency Management Agency, Las Cruces, NM, December 17, 2010.

Certificate, Household Pets and Service Animals in Disasters: An Introduction to Evacuation and Emergency Sheltering. DHS / FEMA, Henrico Training Center, Henrico, VA, August 24, 2011.

Certificate of Training: Virginia Agroterrorism Conference, Virginia Center for Policing Innovation, February 4, 2011.

Certificate: Working with the IACUC (non-VA version, AALAS Learning Library, June 13, 2011.

Certificate of Training: Virginia Agroterrorism Conference, Virginia Center for Policing Innovation, Blacksburg, May 9, 2012.

TEACHING AND ADVISING

On average, approximately 30-40% of my faculty appointment was dedicated to teaching and advising. I was responsible for the design a number of undergraduate, graduate, and professional courses as well as serving as course leader and principle lecturer. I also served as a lecturer in a number of other courses offered by the College of Veterinary Medicine and the College of Agriculture and Life Sciences. My advising responsibilities primarily involved professional and graduate students.

UNDERGRADUATE COURSES

AT 0484	Poultry Management (3cr), Lecturer, responsible for 2 hrs of lecture, 2 hrs of lab, (class size ~15), 1995-1996.
AT 0334	Principles in Animal Health (3 cr), Lecturer, responsible for 2-3 lectures, Biosecurity, Poultry Health, (class size ~20), 2004-2017.
APSC 1504	Animal and Poultry Sciences Survey (1cr), Lecturer, responsible for 1 hr of lecture, (class size ~50), 1995.
APSC 4404	Commercial Poultry Enterprise Management (4cr), Lecturer, responsible for 4 hrs of lecture - turkey production, immunology, vaccination, emerging diseases of poultry (class size ~20), 1999-2002, 2010. The course was reorganized by a new faculty member in 2014. Now responsible for 2.0 hrs of lecture on common disorders of poultry, 2014-Present.
APSC 4504	Poultry Production Systems Management (3cr), Lecturer, 1 hour lecture on Avian Influenza and Newcastle Disease, 2004, 2005.
APSC 4974	Independent Study - Poultry Health (1cr), Course Designer / Leader / Lecturer, Responsible for 8 hrs of lecture, 2 x 8 hr field trips, (class size 3), 1994.
APSC 4974	Independent Study - Laboratory Diagnosis of Poultry Diseases (1cr). Course Designer / Leader / Instructor, lab time arranged, (class size 1), 1998.
APSC 4974	Independent Study - Poultry Management (2cr). Lecturer, responsible for 1 lecture, (class size 2), 1999.
APSC 4974	Independent Study - Poultry Health (1cr), Course Designer / Leader / Instructor, lab time arranged, (class size 1), 1999.
BIOL 4974	Independent Study - Laboratory Investigation / Microbiology (1cr). Course Designer / Evaluator, lab time arranged, (class size 1), 1999.
BMVS* 4024	Diseases of Poultry (2cr), Course Designer / Leader / Lecturer, responsible for 30 hrs of lecture. (class size 20-40), 1993, 1995, 1997, 1999, 2001, 2003, 2005, 2007, 2009, 2011, 2013, 2015, 2017, 2019, 2020.
BMVS 4974	Independent Study - Clinical and Biological Aspects of Hemorrhagic Enteritis Virus. (2cr), Course Designer / Leader, lab time arranged, (class size 1), 1998.
BMVS 4974	Independent Study – Research Methods in Infectious Diseases of Poultry, Course Designer / Evaluator, lab time arranged, (class size 1), 2012.

- BMVS 4974 Independent Study - Diseases of Poultry (1cr), Course designer / Leader / Lecturer, responsible for 14 hrs of lecture, 1 2hr lab, (class size 1), 2002.
- BMVS 4994 Undergraduate Research (1cr), Research Advisor, lab time arranged (2 semesters, class size 1), 2001.
- HON 4974 Independent Study (Honors) - Serological and Molecular Diagnostic Techniques (1cr). Course Designer / Leader, lab time arranged, (class size 1), 2000.
- HON 4974 Independent Study (Honors) - Molecular Diagnostic Techniques for Salmonella (1cr). Course Designer / Leader, lab time arranged, (class size 1), 2007.

* Prior to 2004, 4000-7000 level courses were given the designation of VMS XXXX.

GRADUATE COURSES

- BVMS 5004 Emerging Infectious Diseases (online, 2cr, cross-listed VM 9085), Lecturer, responsible for 1 lecture, (class size ~20), 2001-2018.
- BVMS 5574 Advanced Poultry Diseases (3cr), Course Designer / Leader / Lecturer, students attend VMS 4024 plus 13 x 1 hr discussions and 1 x 8 hr field trip, (class size ~ 3-6), 1995, 1999, 2001, 2003, 2005, 2007, 2009, 2011, 2013, 2015, 2017.
- BVMS 5944 Graduate Seminar in Veterinary Medical Science (1cr), Lecturer, responsible for 1 hr of lecture, (class size ~ 20), 1998, 2004.
- BVMS 5974 Independent Study - Poultry Health, (3cr), Course Designer / Leader / Lecturer, 1 APSC graduate student participated in VM 8464, 1992.
- BVMS 5974 Independent Study - Poultry Production and Health (2cr). Coordinator, laboratory hrs arranged, (class size 1), 1998.
- BVMS 5974 Independent Study - Geographical Information Systems, (1cr), Course Designer / Leader / Lecturer, arranged, (class size 2), 2001.
- BVMS 5974 Independent Study – Poultry Diagnostics, (1cr), Research Advisor, laboratory time arranged, (class size 2), 2008.
- BVMS 5994 Research and Thesis, (variable credit, see graduate students advised), 1994-96, 1998-2004.
- BVMS 7944 Research and Dissertation, (variable credit, see graduate students advised), 1995-2016.
- PHS 5024 Epidemiology, (3 cr), Lecturer, responsible for 2.0 hr of lecture (class size ~ 30), Topic: Emergency Preparedness, 2013–2018.
- PHS 5014 Environmental Health (3cr), Lecturer, responsible for 2 hrs of lecture (class size 10), Topic: Food Safety / Security. 2012–20.

- PHS 5304 Zoonoses and Communicable Diseases Common to Man and Animals (3cr), Lecturer, Responsible for 5 hrs of lecture (class size ~ 30), Topics: Food Safety and Security; Biothreats, Agroterrorism, 2013-2015.
- PHS 5324 Infection Control and Prevention, (3cr), required course for infectious disease (ID) track students, Lecturer, responsible for 2 hrs of lecture, (class size~ 10-30), Topics: Biosecurity, Biosafety, 2011-2012. Course was discontinued in 2013 and then redesigned / reinstated in 2016. I serve as course designer / leader and am responsible for 18 hrs of lecture (Class size ~20). 2016-2018.
- PHS 5914 Practicum in Public Health (6cr), Advisor, responsible for assisting students in identifying a practicum preceptor and assessing progress / work during the practicum which lays the foundation for their Capstone project, 2012-2019.
- PHS 5924 Capstone in Public Health (3cr), Advisor, responsible for guiding students in the selection of a Capstone project / preceptor and assessing their progress and final product. Occasionally students will do their Capstone project in my laboratory 2013-Present.
- PHS 5974 Independent Study – An Independent Study was developed for veterinary students who were unable to take PHS Infectious Disease Epidemiology (offered during the daytime) – the course entailed enrolling and completing the Penn State Online Course - PHS 550 - Principles of Epidemiology (certificate of completion required) plus a deliverable (short paper). I was responsible for managing the students enrolled as well as evaluating the deliverable. (3 cr, P/F), 2015, 2016.

PROFESSIONAL COURSES

PRE-CLINICAL

- VM 8004 Introduction to Veterinary Medicine, Lecturer (1cr), responsible for 1 hr of lecture on careers in poultry medicine, (class size ~90-100), 1991.
- VM 8074 Food Animal Husbandry, Lecturer (1cr), responsible for 1 hr of lecture on poultry production, (Class size ~ 70), 2003-2015.
- VM 8084 Veterinary Epidemiology, Lecturer (2cr), responsible for 2 hrs of lecture, biosecurity (class size ~ 90-100), 2003-2014.
- VM 8134 Veterinary Physiology II (4 cr), responsible for 1 hr of lecture, avian reproduction, (class size ~90-100), 2003-2016.
- VM 8144 Ethology (1cr), Lecturer, responsible for 1hr of lecture, avian behavior (class size~90-100), 2008-2015.
- VM 8204 Companion Animal Husbandry Directed Elective, (1cr), Lecturer, responsible for 1 hr of lecture, pet bird husbandry, (class size ~40), 1994-1997.
- VM 8334 Veterinary Bacteriology and Mycology (4cr), Lecturer, responsible for 5 hours of lecture, Transmissible Spongiform Encephalopathies, Mycoplasmatataceae, Chlamydiataceae, Anaplasmatataceae, Rickettsiataceae, 2003-2011 (class size~90-100), 1 hour of lecture transmissible spongiform encephalopathies 2006-2015; resumed all lectures in 2016.

- VM 8124 Veterinary Virology (4cr), Lecturer, Responsible for 8 hrs of lecture - canine viruses (3 hr), Feline Viruses (1 hr), Avian Viruses (1 hr), Tumor Viruses (3 hr), 2016-2017.
- VM 8374 Theriogenology (2cr), Lecturer, responsible for 1 lecture, avian reproductive disorders, (class size ~ 90-100), 1999-2017.
- VM 8434 Public Health (2cr), Lecturer, responsible for 1 hour of lecture, Agroterrorism, (class size ~15), 2008.
- VM 8464 Avian Medicine (2cr). Course Designer / Leader / Lecturer, responsible for 15-18 / 28 hrs of lecture, 4 x 2 hrs of lab x 2 sections, (class size ~ 90), 1991-1999.
- VM 8616 Food Animal Medicine and Surgery II (2cr), Lecturer, responsible for 1 hr of lecture, biosecurity for food animal practice, (class size ~10-30), 2003-2018.
- VM 8684 Advanced Epidemiology, (2 cr), Lecturer, responsible for 2 hrs of lecture (class size ~ 15), Topic: Agroterrorism, Risk Assessment, Target Hardening, 2013–2015.
- VM 8686 Introduction to Clinics II (1cr), Instructor, responsible for 2 x 1 hr (split section) lectures on hospital biosecurity protocols (class size~90-120), 2006-2014.
- VM 8734 Population Medicine (3cr). Lecturer, responsible for 3 x 2hrs of lab, (lab group size ~8-10), 1992-2000.
- VM 8754 Veterinary Cardiorespiratory Medicine (3cr). Co-course designer / co-leader / lecturer, coordinated redesign of respiratory portion of course and responsible for 4 / 29 hours of lecture, (class size ~ 90-100), 2000-2017.
- VM 8774 Veterinary Dermatology (3cr). Lecturer, responsible for 1-2 hrs of lecture, (class size ~ 90-100), 1994-2018.
- VM 8984 Professional Foundations in Veterinary Medicine (ProFo IV-2cr,V-2cr), Lecturer, responsible for 2 hrs of lecture on Biosafety, Safety, and Allergies, VTH Biosecurity Protocols, 2014-2018.
- VM 9004 Avian Medicine and Surgery Elective (1cr), Course Designer / Leader / Lecturer, responsible for 15/15 lectures, 4 hrs lab (class size ~10-20), 2001-2018, 2019 - 2/15 lectures, relinquished course leadership due to retirement.
- VM 9044 Food Animal Clinical Problem Solving (1cr), Course Leader / Instructor, responsible for 2 hour of discussion, (class size ~ 20), 2007– 2011, Instructor, 2 sections x 1 hour of discussion, (class size ~ 20) 2012-2018.

REVISED PRECLINICAL CURRICULUM – Beginning Fall 2016 (approx 120 students)

- VM 8164 The Normal Animal (8cr), Instructor, responsible for 2 lectures on aviculture and normal avian clinical anatomy and physiology, 2016-2018, reduced to 1 lectures on Aviculture following retirement.

- VM 8174 Dealing with Threats (10cr), Instructor, responsible for 2 lectures on obligate intracellular parasitic bacteria, 2 lectures on biosecurity, 2016-2017, reduced to 2 lectures on biosecurity in 2018 following retirement.
- VM 8184 Becoming a Professional I (1cr), 2 lectures on Biosafety, Injuries and Allergies / Biosecurity 2016-2018.
- VM 8194 The Next Generation (9cr), Instructor, responsible for 2 lectures on Normal Avian Reproduction and Theriogenology, 2018-Present.
- VM 8564 Breathing and Circulating (10cr), Instructor, responsible for 2 lectures on avian respiratory disorders, 1 advanced lecture on obligate intracellular bacterial infections of the respiratory and circulatory systems, 2017-Present.
- VM 8584 Eating and Eliminating (10cr), Instructor, responsible for 2 lectures on avian nutrition and gastrointestinal disorders, 2017-2018.
- VM 8824 Moving and Sensing, (20cr), Instructor, responsible for 1 lecture on Avian Dermatology, 2017-Present.
- VM 8984 Becoming a Professional III (1cr), 1 lectures on VTH Biosecurity Protocols 2017-2018.
- VM 8204 Healthy Populations (7cr), Design team and instructor, responsible fro 6 lectures - genetic basis of disease, principles of disease prevention, principles of disease control, avian ethology, poultry preventative medicine, food defense and 2 labs - food defense table-top exercise. 2018-Present.

CLINICAL

Senior veterinary students are required to take 17, 3 week clerkships. Approximately half of these are required, intramural e.g., within the Veterinary Teaching Hospital. Depending on the clinical track chosen by the students, approximately 2-4 extramural clerkships are required. The remainder of the clerkships may take the form of intramural or extramural electives. For the most part, all clerkships are available, year-round, every year. The number of students for each clerkship varies from year to year.

- VM 9424 Avian Medicine Elective Clerkship (2cr), Course Designer / Instructor for internal clerkships, coordinator for external poultry industry, avicultural, pet bird practices, 1991-2002.
- VM 9504 Large Animal Clinical Services Clerkship (2cr), Instructor for ratite cases in the Teaching Hospital, 1995.
- VM 9534 Production Management Medicine Clerkship (2cr), Instructor, Occasional student on poultry / aviary field service calls, responsible for food animal rounds (intermittently, 1-2 clerkships / yr), 1995-2005.
- VM 9574 Production Management Medicine Elective (2cr), Instructor, responsible for 2 hrs of lecture on Biosecurity, HACCP, HIMP, 2002.
- VM 9644 Private Practice (2cr), Coordinator for external small animal, avian, and exotic practices, 1994.

VM 9684	Emergency Medicine (2cr) Coordinator for external emergency avian and exotic practice, 1994.
VM 9714	Government and Corporate Clerkship (2cr) Assist with coordination of clerkships in poultry industry, industrial aviculture operations, poultry diagnostic laboratories, allied industry, wild-bird conservations organizations, 1994-Present.
VM 9714	Government and Corporate Clerkship (2cr) Coordinator for external Clerkship, FAO, Rome, Italy.
VM 9724	Laboratory Services Clerkship (4cr), Laboratory Biosecurity and Biosafety 3 hrs lecture / discussion, 2014-2018.
VM 9744	Advanced Pathology (2cr), Coordinator for external pathology clerkship at the University of GA, 1995-2002.
VM 9764	Research Clerkship (2cr) Coordinator / Advisor, 1994-2002.
VM 9774	Self-Initiated Clerkship (2cr), Coordinator for external avian and exotic practices, 1994-2002.

EVALUATIONS OF TEACHING EFFECTIVENESS

STUDENT EVALUATIONS

APSC 4404	Poultry Enterprise Management	2000	5.70 / 6.00
		2001	5.26 / 6.00
		2017	5.78 / 6.00
BMVS 4024	Diseases of Poultry	1993	5.82 / 6.00
		1995	5.44 / 6.00
		1999	5.83 / 6.00
		2001	5.80 / 6.00
		2003	5.88 / 6.00
		2005	6.00 / 6.00
		2007	5.81 / 6.00*
		2013	5.73 / 6.00**
		2017	5.90 / 6.00
BMVS 5574	Advanced Poultry Diseases	1995	5.60 / 6.00
		1999	5.83 / 6.00
		2001	6.00 / 6.00
		2003	6.00 / 6.00
		2005	6.00 / 6.00
		2007	6.00 / 6.00
		2013	5.50 / 6.00
		2017	5.50 / 6.00
PHS 5324	Zoonoses and Comm Dis.	2012	5.80 / 6.00
VM 8084	Vet. Epidemiology	2004	5.24 / 6.00
		2008	4.74 / 6.00
VM 8334	Vet. Bacteriology and Mycology	2003	5.33 / 6.00
		2005	5.42 / 6.00

		2006	5.48 / 6.00
		2007	5.15 / 6.00
		2008	4.30 / 6.00
		2010	5.30 / 6.00*
VM 8464	Avian Medicine	1991	5.61 / 6.00
		1992	5.73 / 6.00
		1993	5.30 / 6.00
		1994	5.45 / 6.00
		1995	5.55 / 6.00
		1996	5.65 / 6.00
		1997	5.54 / 6.00
		1998	5.59 / 6.00
		1999	5.87 / 6.00
VM 8754	Vet. Cardiorespiratory Medicine	2000	5.61 / 6.00
		2001	5.62 / 6.00
		2002	5.43 / 6.00
		2003	5.64 / 6.00
		2004	5.60 / 6.00
		2005	5.18 / 6.00
		2006	5.27 / 6.00
		2007	5.54 / 6.00
		2008	4.92 / 6.00
		2010	5.35 / 6.00
VM 8734	Theriogenology	2001	5.48 / 6.00
		2002	5.39 / 6.00
		2003	5.48 / 6.00
VM 8774	Vet. Dermatology and Endo.	2001	5.40 / 6.00
		2008	4.40 / 6.00
VM 9004	Avian Medicine and Surgery	2001	5.75 / 6.00
		2002	5.73 / 6.00
		2003	5.70 / 6.00
		2004	5.73 / 6.00
		2005	5.67 / 6.00
		2006	5.56 / 6.00
		2007	5.40 / 6.00
		2010	5.50 / 6.00
		2013	4.80 / 5.00***
VM 9044	Food Animal Clinical Problem Solving	2005	5.63 / 6.00
		2006	4.80 / 6.00
VM 9534	Production Management Medicine	2004	6.00 / 6.00
VM 9724	Lab Services Clerkship	2015	5.50 / 6.00
		2016	5.68 / 6.00
		2017	5.52 / 6.00
PHS 5014	Environmental Health	2017	5.50 / 6.00
PHS 5324	Infection Control and Prevention	2017	5.35 / 6.00
		2018	5.12 / 6.00

* With the exception of new course/lecture assignments (generally 3 hrs or more of lecture), evaluations were temporarily discontinued following my promotion to full professor in the spring of 2011 (dossier submitted in the fall of 2010), due to the volume of instructor evaluations required of students.

** The Virginia Tech Student Perception of Teaching (SPOT) Survey is now used for all undergraduate and graduate courses

*** A new evaluation rubric was instituted in the DVM program (not the MPH program) in 2012 utilizing One45, a curriculum tracking / mapping software package. The new evaluation rubric is based on a 5 point Leikert scale as opposed to 6 point scale used in previous years. Only selected courses are evaluated in a given academic year to reduce the load on students.

PEER EVALUATIONS OF INSTRUCTION

1994	5.30 / 6.00
1996	5.55 / 6.00
1998	5.60 / 6.00
2010	5.31 / 6.00

CURRICULUM AND PROGRAM DEVELOPMENT

Residency in Poultry Medicine - A committee was formed in 1994 to develop a post-DVM, MS / residency program in poultry medicine. This was to coincide with the development of a Regional Poultry Health Program involving the MD, VA, DE departments of agriculture and corresponding Land Grant Universities. Although the regional program did not materialize, the residency received formal approval from the American College of Poultry Veterinarians in July 1998 and funding was obtained for the first resident (based at UMCP-VMRCVM, Gedulsky Center). I served as a member of the development committee and resident co-advisor 1994-2002. In 2002, the residency was discontinued due to lack of funding.

VMRCVM Teaching Aviary - With private donations, a Teaching Aviary was designed and constructed at VMRCVM, Center for Molecular Medicine and Infectious Diseases. This aviary housed a variety of pet bird species that were available for instruction in husbandry, breeding, handling, and diagnostic sample collection. The birds were initially used in the VM 8464 (Avian Medicine) laboratories and were then used in the VM 9004 Avian Medicine and Surgery Elective) laboratories. I served as faculty coordinator for this facility from its inception to closure due to decommissioning of the building as part of the AAALAC certification process, 1991-2007.

COURSES DEVELOPED AS COURSE LEADER / CO-LEADER:

- | | |
|-----------|--|
| VM 8464 | Avian Medicine – Originally part of the core curriculum, this course addressed clinical anatomy and physiology and diseases of the major orders of birds. I developed the syllabus and most of the course notes; served as course coordinator and primary lecturer, 1991-1999. |
| BMVS 4024 | Diseases of Poultry - Course was redesigned in 1995 to emphasize clinical problem solving. Originally taught every other year, began teaching every year 2019. I serve as course coordinator and primary lecturer, 1995-Present. |

- BMVS 5574 Advanced Poultry Diseases - Course was designed as to complement the lecture section of BMVS 4024. An additional discussion section added to provide 3 cr. Field excursions were also included to give practical field experience in problem solving, taught every other year in conjunction with BMVS 4024, began offering every year in 2018, 1995-Present.
- VM 8754 Cardiorespiratory Medicine - Originally 2 separate courses. I was responsible for the coordinating the development of the Respiratory Medicine portion of the course which involved faculty from both the Large and Small Animal Clinical Sciences Departments. I served as Co-course coordinator with Dr. J. Abbott, 2000-2017.
- VM 9004 Avian Medicine and Surgery - Course was designed to replace VM 8464, and address specifically pet birds that would commonly be seen in companion animal practice. In addition to system-based lectures there are 4 labs to provide hands on experience with necropsy, physical exam / diagnostic sample collection, therapy / bandaging, routine surgical procedures. I served as course Leader and primary lecturer, 2001-2018.
- PHS 5324 Infection Control and Prevention was required course for infectious disease (ID) track students. It was discontinued in 2013. I was tasked with the redesign of the course within the framework of the existing approved syllabus. The process began in earnest during the spring of 2016 and the redesigned course was offered in the fall of 2016.

REVISED PRECLINICAL CURRICULUM – DEVELOPMENT

- VM 8204 Healthy Populations – Member of course design team

OTHER GRADUATE TRAINING PROGRAMS

School of Biomedical Engineering and Science (SBES) – Coordinator of the VTH clinical rotations for Wake Forest and Virginia Tech students during spring semester: two, 3 day blocks, with rotation through 6 services, approximately 13 students each block, 2011-2018.

COURSES TAUGHT ON CONTRACT – LINCOLM MEMORIAL UNIVERSITY

- CVM 769B Poultry Health Elective (1cr), Course Designer / Leader / Lecturer, responsible for 15 / 15 hrs of lecture, 2 x 2 hr oral examination. (class size 15-20), 2017, 2018, 2019, 2022.
- | | | |
|-------------|------|-----------|
| Evaluations | 2018 | 4.00/4.00 |
| | 2019 | 4.00/4.00 |
- CVM 723B-A Veterinary Virology (1.5 cr), Lecturer, 2 hrs of lecture, viral diseases of poultry, 2022.
- CVM 762B Food Animal Medicine and Surgery, Lecturer, 4 hrs of lecture, diseases of poultry, 2022.

GUEST LECTURES – NORTH CAROLINA STATE UNIVERSITY

VMP 982 Poultry Health, invited facilitator, poultry health rounds / case presentations,
3 hrs / semester when offered, 2018, 2019.

ADVISING

GRADUATE ADVISING

F. Hegngi	MS	DLACS*	1994-1996	Co-Advisor
Y. Tian	MS	DBSP	1998-2000	Com Member
J. Sharp	MS	DLACS/DBSP	1998-2002	Co-Advisor
S. Spenser	MS	DLACS	1998-Withdrew	Com Member
M. Castle	MS	FST	1998-Withdrew	Com Member
B. Morris	MS	APSC	1999-2002	Com Member
D. Bautista	MS	UMD	2000-2002	Com Member
D. Borris	MS	DBSP	2000-2002	Co-Advisor
S. Koneru	MS	DBSP	2001-Withdrew	Co-Advisor
K. Gyenai	MS	APSC	2003-2005	Com Member
N. McMillan	MS	DLACS	2002-2004	Advisor
B. Woolsey	MS	APSC	2002-2004	Com Member
C. Walzack	MS	APSC	2003-Withdrew	Com Member
K. Cooper	MS	DBSP	2003-2005	Com Member
T. Herfel	MS	APSC	2004-2007	Com member
J. Gillespie	MS	DBSP	2005-2009	Com Member
A. Pascua	MA	UMD	2005-2006	Com Member
C. Troche	MS	APSC	2005-2007	Com Member
J. Machen	MS	DBSP	2005-Withdrew	Com Member
S. Salmon	MS	DSACS	2008-Withdrew	Com Member
H. Albrecht	MS	APSC	2010-2012	Com Member
S. Riddle	MS	GEOG	2010-Withdrew	Com Member
K. Aulakh	MS	DSACS	2010-2011	Com Member
J. Salevesky	MS	APSC	2011-Withdrew	Com Member
M. Ritzi	MS	APSC	2013-2014	Com Member
T. Potter	MS	APSC	2013-2018	Com Member
M. White	MS	APSC	2015-2017	Com Member
D. Lewis	MS	APSC	2018-2018	Com Member
J. Kannan	MPH	DPHS	2012-2013	Advisor**
D. Burch	MPH	DPHS	2013-2015	Advisor
R. Baum	MPH	DPHS	2013-2013	Advisor
N. Browne	MPH	DPHS	2013-2015	Advisor
J. Sullivan	MPH	DPHS	2013-2014	Advisor
M. Bruise	MPH	DPHS	2013-2017	Advisor
S. Sult	MPH	DPHS	2013-Withdrew	Advisor
E. Yanovich	MPH	DPHS	2013-2015	Advisor
U. Christmann	MPH	DPHS	2013-2016	Advisor
C. Doody	MPH	DPHS	2013-2014	Advisor
B. Rodebaugh	MPH	DPHS	2014-2016	Advisor
M.Thorpe	MPH	DPHS	2014-2016	Advisor
K. Smith	MPH	DPHS	2014-2016	Advisor
S. Grossberg	MPH	DPHS	2015-2016	Advisor
E. Hepner	MPH	DPHS	2015-2016	Advisor
J. Lebovitz	MPH	DPHS	2015-2016	Advisor
K. Meidenbauer	MPH	DPHS	2015-2016	Advisor
V. Oakes	MPH	DPHS	2015-2016	Advisor

O. Rozov	MPH	DPHS	2015-2016	Advisor
S. Flayh	MPH	DPHS	2015-Withdrew	Advisor
N. DeLeeuw	MPH	DPHS	2015-2017	Advisor
H. Sriranganathan	MPH	DPHS	2015-2017	Advisor
M. Wood	MPH	DPHS	2015-2017	Advisor
J. Davis	MPH	DPHS	2015-2017	Advisor
T. Lawnicheck	MPH	DPHS	2015-2018	Advisor
V. Tavella	MPH	DPHS	2015-2018	Advisor
L. Page	MPH	DPHS	2016-2018	Advisor
M. Shelton	MPH	DPHS	2016-2018	Advisor
E. Russel	MPH	DPHS	2016-2018	Advisor
K. Wingfield	MPH	DPHS	2016-2020	Advisor
M. Kearney	MPH	DPHS	2016-2018	Advisor
M. Zlotnick	MPH	DPHS	2016-2017	Advisor
S. Boyle	MPH	DPHS	2017-2018	Advisor
A. Trumble	MPH	DPHS	2017-2018	Advisor
A. Davis	MPH	DPHS	2017-2019	Advisor
S. Carney	MPH	DPHS	2017-2019	Advisor
M. Goyanko	MPH	DPHS	2017-Present	Advisor
J. Whichard	PhD	DLACS/DBSP	1995-2000	Co-Advisor
C. Tirawattanawanich	PhD	DLACS	1995-2001	Advisor
S. Altekruise	PhD	DLACS	1998-2001	Com Member
S. Meade	PhD	DLACS	1999-2005	Advisor
F. Huang	PhD	DBSP	2000-2005	Com Member
Z. Sun	PhD	DBSP	2000-2005	Com Member
N. Beach	PhD	DLACS	2001-2006	Advisor
P. Billam	PhD	DBSP	2001-2007	Com Member
A. Barri	PhD	APSC	2004-2008	Com Member
L. Li	PhD	APSC	2005-2008	Com Member
K. Gyenai	PhD	APSC	2005-2008	Com member
A. Parsons	PhD	APSC	2006-Withdrew	Com member
A. Feagins	PhD	DBSP	2006-2010	Com Member
L. Settle	PhD	DLACS/DBSP	2006-2012	Co-Advisor
A. Hawthorn	PhD	DBSP	2006-Withdrew	Com Member
X. Sun	PhD	APSC	2007-2007	Com Member
M. Lighty	PhD/DVM	DPHS	2007-2015	Co-Advisor
R. Affifi	PhD	ECP	2007-2008	Advisor
G. Lehman	PhD	APSC	2007-2012	Com Member
C. Walk	PhD	APSC	2008-2009	Com Member
J. Walters	PhD/DVM	DPHS	2009-2015	Advisor
H. Mahsoub	PhD	DPHS	2010-2016	Advisor
J. Sottosani	PhD	APSC	2010-2012	Com Member
D. Paiva	PhD	APSC	2010-2012	Com Member
S. Seyondo	PhD	ABSE	2010-2013	Com Member
C. Cox	PhD	APSC	2011-2013	Com Member
D. Yugo	PhD	DBSP	2012-2018	Com Member
B. Petruzzi	PhD	DBSP	2013-2018	Com Member
H. Wladecki	PhD	APSC	2013-Withdrew	Com Member
Z. Aboezz	PhD	ECP	2015-2017	Advisor
D. Collins	PhD	DPHS	2016-Withdrew	Advisor
J. Cary	PhD	SBES	2016-2019	Com Member
N. Emami	PhD	APSC	2018-2020	Com Member
M. White	PhD	APSC	2018-Present	Com Member

ABSE = Agricultural Biosystems Engineering
 APSC= Department of Animal and Poultry Sciences
 DBSP = Department of Biomedical Sciences and Pathobiology
 DLACS = Department of Large Animal Clinical Sciences
 DPHS = Department of Population Health Sciences
 DSACS = Department of Small Animal Clinical Sciences
 FST = Department of Food Science and Technology
 GEOG = Department of Geography
 UMD = University of Maryland
 ECP = Egyptian Channel Program
 SBES = School of Biomedical Engineering Sciences

* F. Hegngi began a MS at UMD prior to starting the DVM program at VMRCVM. After completing his DVM, he completed as research project under my direction in DLACS and was awarded his MS from UMD

** All MPH students do a Practicum and Capstone project. However, the MPH is a non-thesis degree. The advisor indirectly oversees the projects which are conducted in collaboration with a preceptor.

RESEARCH PROJECT SUPERVISION – Online MS in Agriculture and Life Sciences

A. Price, Food Safety and Biosecurity, 2017-2019

SUMMER RESEARCH FELLOWS

E. Pennel, VMRCVM Government and Corporate Fellow	1997
R. Allen, VMRCVM Government and Corporate Fellow	1998
M. Caldwell, Minorities Academic Opportunity Program	2001
M. Childress, VMRCVM Government and Corporate Fellow	2002
J Regalado, VMRCVM, Summer Veterinary Research Program (T32)	2014
K. Hecker, VMRCVM, Summer Veterinary Research Program (T32)	2016
G. Elias, VMRCVM, Summer Veterinary Research Program (T32)	2017
C. Drumgoole, Multicultural Academic Opportunities Program	2017

SUMMER RESEARCH WAGE STUDENTS

G. Robinson	1991
C. Myers, P. Bright	1992
M. Browning, J. Whichard	1993
R. Peters	1994
H. Bowles	1994
R. Evans	1995
L. Perkins	1996
J. McCall	1997
K. Seaton	1999, 2000
K. Arthur	2000
N. Beach	2001
P. Lee	2001
R. Bryant	2002-2003
T. Cecere	2003
M. Cep	2004
S. Wood	2006
L. Settle	2006
V. Tavella	2017

PRE-VETERINARY ADVISING

P. Lee	2000
J. Beuchner	2001
H. Bradshaw	2001
R. Bryant	2002, 2003

S. Wood	2004
A. Portolano	2007, 2008
J. Walters	2008

PROFESSIONAL STUDENT MENTORING - Served as faculty contact for students enrolled in the professional curriculum.

M. Friedlander, C. Seifert	1992-1996
A. Garrity	1993-1997
H. Bowles	1993-1997
J. Cann	1997-2001
E. Coccaro, J. Cochran, S. Gustin	1998-2002
D. Gallof, M. McClain, K. Schuman	1999-2003
C. Metzner, L. Neavear	2000-2004
J. Wilson	2001-2005
N. Taylor	2002-2004
M. Freed	2003-2007
D. Johnson	2004-2008
M. Lighty	2009-2013
J. Walters	2012-2016

PROFESSIONAL TRACK ADVISING

Provide faculty oversight for 4th year track design and execution.

G. Robinson	1991-1993
F. Hegngi, E. Mattingly	1992-1994
P. Bright, J. Orenstein, J. Augusto, C. Myers	1993-1995
W. Hurlock	1994-1996
A. Garrity, H. Bowles	1995-1997
R. Evans, L. Perkins, T. Cersley	1996-1998
S. Etter	1998-2000
J. Cann	1999-2001
S. Gustin	2000-2002
D. Gallof	2000-2002
K. Arthur, M. Jefferson	2001-2003
D. Johnson	2006-2008
M. Lighty	2011-2013
J. Walters	2014-2016

LICENSED VETERINARY TECHNICIAN TRAINING / FACULTY POINT OF CONTACT

K. Reuss (Blue Ridge Community College)	2009-2011
D. Jaszewski (Blue Ridge Community College)	2009-2011
A. Berringer (Purdue University)	2011-Withdrew
R. DiPietro (Purdue University)	2011-2013
S. Trent (Blue Ridge Community College)	2013-2014
K. Barber (Blue Ridge Community College)	2013-2014

SPECIAL ACHIEVEMENTS OF FORMER AND CURRENT STUDENTS

Dr. Fidelis Hegngi, DVM (1994), MS (1996), served as Director of the State Diagnostic Lab in Salisbury, MD, Assistant State Veterinarian, Maryland Department of Agriculture, Annapolis, MD, currently employed as Avian Influenza Program Coordinator, USDA / APHIS, Riverdale, MD.

Dr. Patricia Bright DVM (1995), obtained an MS in Wildlife Conservation, became head of Veterinary Services at the Wildlife Center of Virginia, Currently with U.S. Geological Survey, Biology Program, Reston, VA.

Dr. Jean Whichard DVM (1995), PhD (2000), was awarded a Cunningham Fellowship while at Virginia Tech, won the VMRCVM Graduate Research Competition in 1996 and 1997, won the award for Best Graduate Research Presentation given at the 69th Northeastern Conference on Avian Diseases in 1997, won the Outstanding University Dissertation Award for 2000-2001, received an ORISE Fellowship at the Centers for Disease Control and Prevention, Atlanta GA, Currently Supervisor / Lead Scientist, Salmonella Phage Typing Laboratory, National Antimicrobial Resistance Program, Centers for Disease Control and Prevention, Atlanta, GA.

Dr. William (Gary) Hurlock, DVM (1996), accepted into highly competitive poultry medicine internship at North Carolina State University, subsequently employed as Manager of Food Quality Assurance, Wayne Foods, Inc., currently employed by Keystone Foods as Vice President for Quality Control.

Dr. Adrian (Chip) Garrity, DVM (1997), accepted into highly competitive Masters in Avian Medicine Program at the University of Georgia, currently with Tyson Foods, Inc.

Dr. Heather Bowles, DVM (1997), boarded in Avian Medicine, American Board of Veterinary Practitioners, currently in practice, Hunt Valley, MD.

Dr. Robert Evans, employed as a Technical Service Veterinarian by ELANCO – Poultry Division, boarded in Poultry Medicine, American College of Poultry Veterinarians, production veterinarian for Cargill Turkey Products, LLC, Harrisonburg, VA, currently back with ELANCO – Poultry Division.

Dr. Laura Perkins, won the Kenneth Eskelund Preceptorship from the AAAP, accepted into highly competitive PhD program at the Southeastern Poultry Research Laboratory, Athens GA, received the Reed-Rumsey Award for Achievement in Poultry Disease Research in 2001, boarded in pathology, American College of Veterinary Pathology.

Dr. Scott Gustin (DVM class of 2002), awarded the Salisbury Fellowship in Poultry Medicine (VMRCVM), accepted into the Masters in Avian Medicine Program, University of Georgia, currently employed as International Technical Service Advisor, Cobb-Vantress, Inc., Currently Director of Veterinary Services, Cobb-Vantress, Inc.

Dr. Chanin Tirawattanawanich, PhD (2001), formerly Chair, Department of Physiology; Currently Director of International Programs, College of Veterinary Medicine, Kasetsart University, Bangkok, Thailand.

Naya McMillan, MS (2004), went on to obtain a PhD in Public Health, School of Public Health, University of Alabama, Birmingham, AL. Currently employed by The Lewin Group, Professional Consultants, Washington, DC.

Dr. Sharonda Meade, (PhD, 2005) won award for Best Graduate Research Presentation given at the Northeastern Conference on Avian Diseases in 1999, 2004; accepted into a

post-doctoral position with the New Jersey Institute for Biomaterials Research; completed a VMD at the University of Pennsylvania, 2011, Joined faculty at University of Pennsylvania, Ryan Veterinary Hospital, Avian and Exotic Medicine. Left the University of Pennsylvania to pursue private practice, Qualified for ABVP boards in 2022.

Dr. Nathan Beach, PhD (2006), received the “Rick Cordia – T. Bonner Stewart Award for Excellence in Animal Research” (Superior Paper in the Graduate Student Competition) at the 56th Annual Meeting of the Animal Disease Research Workers in the Southern States and second place in the Graduate Research Competition, Basic Sciences Category, 17th Annual Research Symposium (VMRCVM), 3rd place Graduate Research Competition, Basic Sciences Category, 18th Annual Research Symposium, (VMRCVM); after graduation from Virginia Tech accepted post-doctoral position in molecular genetics, James Madison University followed by post-doctoral position with Dr. X.J. Meng, VMRCVM, hired by Centro Nacional de Biotecnología, Consejo Superior de Investigaciones Científicas, Madrid Spain.

Dr. D. Johnson, Corporate Veterinarian, Mountaire Farms, Millsboro, DE. Passed Specialty Boards, American College of Poultry Veterinarians.

Dr. Hassan Mahsoub, First Place, Poster Presentation, Graduate Research Symposium, 2015. Preliminary characterization of turkey hemorrhagic enteritis virus receptor(s), an avian adenovirus, on B lymphoblastoid cells. 30th Annual Graduate Research Symposium, Virginia Polytechnic Institute and State University, March 26, Blacksburg, VA. Currently Post-doc, virology, Dept of Biomedical Sciences and Pathobiology, VMRCVM, Virginia Tech, Blacksburg, VA.

Dr. Dustin Burch, MPH 2015. Boarded - American College of Poultry Veterinarians, 2017, Currently head of veterinary services, Aviagen Turkeys, Lewisburg, WV.

Dr. Megan Lighty, Corporate Veterinarian, Jennie-O (Hormel Foods Corp, Austin, MN). Boarded – American College of Poultry Veterinarians, 2017. Currently on faculty as poultry diagnostician, Pennsylvania State University, Department of Pathobiology, Pennsylvania Animal Diseases Diagnostic Laboratory, State College, PA.

Dr. Jessica Walters, Director of Laboratory Services, Virginia Department of Agriculture and Consumer Services, Harrisonburg Diagnostic Laboratory. Boarded – American College of Poultry Veterinarians, 2017, promoted to Laboratory Director, 2017.

RESEARCH AND SCHOLARLY ACTIVITY

Forty percent (40%) of my time was dedicated to research and scholarly activity. This included grant writing, grant administration, conducting laboratory experiments, manuscript preparation, and presentation of research findings at scientific meetings. There was some crossover between what is considered research and field service due to the nature of our field investigative work. There was also some crossover between graduate student advising (see Teaching and Advising) and research.

THESES AND DISSERTATIONS

Pierson, F.W., 1980. Leg Weakness in Turkeys: A Study of Etiologies. Master's Thesis, Purdue University, West Lafayette, IN.

Pierson, F.W., 1993. The Roles of Multiple Infectious Agents in the Predisposition of Turkeys to Colibacillosis. Ph.D. Dissertation, Virginia Polytechnic Institute and State University, Blacksburg, VA.

BOOK CHAPTERS

Domermuth, C.H., W.B. Gross, and **F.W. Pierson**, 1989. Hemorrhagic enteritis of turkeys. In: Laboratory Manual for the Isolation and Identification of Avian Pathogens. 3rd edition. G. Purchase, L. Arp, C.H. Domermuth and J. Pearson, eds. Kendall/Hunt Publishing Co., Dubuque, Iowa, pp 82-84.

Pierson, F.W., and C.H. Domermuth, 1997. Hemorrhagic enteritis, marble spleen disease, and related infections. In: Diseases of Poultry, 10th ed., B.W. Calnek, H.J. Barnes, C.W. Beard, L.R. McDougald, Y.M. Saif, eds., Iowa State University Press, Ames, IA.

Pierson, F.W., 1998. Hemorrhagic enteritis of turkeys. In: The Merck Veterinary Manual, 8th ed., S. Aiello, ed., Merck & Co., Inc., Rahway, NJ.

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Pierson, F.W., and C.H. Domermuth, 1998. Hemorrhagic enteritis of turkeys. In: Isolation and Identification of Avian Pathogens, 3rd Ed., American Association of Avian Pathologists, Kennet Square, PA.

Pierson, F.W., 2000. Techniques in avian hematology In: Schalm's Veterinary Hematology, 5th ed., B. Feldman, J. Zinkle, and N. Jain, eds., Lippincott, Williams and Wilkins, Baltimore, MD.

Pierson, F.W., and S.D. Fitzgerald, 2003. Hemorrhagic enteritis and related infections. In: Diseases of Poultry, 11th ed., Y.M. Saif, H.J. Barnes, A. Fadly, J. Glisson, L.R. McDougald, D. Swayne, eds., Iowa State University Press, Ames, IA.

Pierson, F.W., 2005. Hemorrhagic Enteritis and Marble Spleen Disease. In: The Merck Veterinary Manual, 9th ed. C.M. Kahn and S. Line Ed., Merial Limited, Duluth, GA.

Pierson, F.W., and S.D. Fitzgerald, 2008. Hemorrhagic Enteritis and Related Infections. In: Diseases of Poultry, 12th ed., Y.M. Saif, H.J. Barnes, J.R. Glisson, A.M. Fadly, L.R. McDougald, and D.E. Swayne, eds., Iowa State University Press, Ames IA, pp 276-286.

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Avian Pathogens, 5th ed., D.E. Swayne, J.R. Glisson, M.W. Jackwood, J.E. Pearson, W.M. Reed, eds., American Association of Avian Pathologists, Athens, GA, pp 106-110.

Pierson, F.W., and S. D. Fitzgerald, 2013. Hemorrhagic enteritis and related infections. In: Diseases of Poultry, Diseases of Poultry, 13th Ed., David E. Swayne, J.R. Glisson, L. R. McDougald, L. K. Nolan, V. Nair and D.L. Suarez, eds., Wiley-Blackwell, Ames, IA, pp 309-316.

Pierson, F.W., 2017. Adenoviral Diseases. In: Diagnosis of Major Poultry Diseases. Y.W. Saif and H. Toro Eds. Grupo Asis Biomedica, S.L., Zaragoza, Spain. pp 44-46.

Rautenschlein, S., H. Mahsoub, S. Fitzgerald, and **F. Pierson**, 2020. Hemorrhagic Enteritis and Related infections. In: Diseases of Poultry, 14th Ed., D. E. Swayne , J.R. Glisson, L.R. McDougald, L.K. Nolen, D.L. Suarez, V.L. Nair, Eds. Wiley-Blackwell, Ames IA.

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Wilson, E.K., **F.W. Pierson**, P.Y. Hester, R.L. Adams, and W.J. Stadelman, 1980. The effects of high environmental temperature on feed passage time and performance traits of white pekin ducks. Poultry Sci 59: 2322-2330.

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INTELLECTUAL PROPERTIES

VTIP 13-092 - Bacteriophage Felix O1 Endolysin as a Topical Spray/Rinse Application for the Remediation of Salmonella Bacteria. **F.W. Pierson**, L. Settle, N. Sriranganathan. Disclosure date: 01/03/2013.

SPONSORED GRANTS AND AWARDS

Domermuth, C.H., **F.W. Pierson** (Author, Co-I), C.T. Larsen, and W.B. Gross, 1987 (1yr). Exacerbation of respiratory E. coli by other pathogens. Poultry Industry Research Check-off Program (\$6,000).

Brown, T.P, **F.W. Pierson** (Co-I), C.T. Larsen, and C.H. Domermuth, 1988 (1yr). Turkey coryza and secondary colibacillosis. USDA / Animal Health and Disease Program (\$5,470).

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Domermuth, C.H., and **F.W. Pierson** (Author, Co-I), 1990 (1yr). Improvement of hemorrhagic enteritis vaccine and its production and use. Wampler-Longacre-Rockingham, Inc., and ROCCO Turkeys, Inc. (\$39,200).

Pierson, F.W. (PI), and N. Srirangnathan, 1992 (1 yr). Phage mediated reduction of Salmonella shedding and contamination in poultry: pilot study. Prestage Farms, Inc. (\$3,750).

Pierson, F.W. (PI), S.M. Boyle, M.T. Jucker, J.V. van den Hurk, C.H. Domermuth, G.G. Schurig, and E.T. Mallinson, 1992 (2yr). A genetically engineered vaccine for the control of salmonellosis, Newcastle disease and hemorrhagic enteritis in turkeys. Wampler-Longacre Turkey, Inc., and ROCCO Turkeys, Inc. (\$78,800).

Pierson, F.W. (PI), C.T. Larsen, R.M. Hulet, G.K. Saunders, C.H. Domermuth, and W.B. Gross, 1992 (2yr). Virginia center for turkey production research - flock health program: field investigation and problem solving. Wampler-Longacre Turkey, Inc., and ROCCO Turkeys, Inc. (\$81,200).

Pierson, F.W. (PI), A. Zajac, R.M. Hulet, R. D. Schwartz, 1993 (1yr) . Efficacy of fenbendazole medicated premix against nematode parasites of turkeys. Hoechst-Roussel Agrivet Co. (\$10,880).

Zajac, A., S. Smith, and **F.W. Pierson** (Co-I), 1993 (1yr). Treatment of avian giardiasis with albendazole. American Federation of Aviculture (\$2,000).

Melendez, L., and **F.W. Pierson** (Co-I), 1993 (1yr). Mechanism of activation of a latent RNA virus in bovine embryonic lung cultures by turkey spleen filtrates infected with avian hemorrhagic enteritis adenovirus, VMRCVM / New Initiative Grant (\$4,480).

Pierson, F.W. (PI), 1994 (2yr). Field service and applied research grant. Wampler-Longacre, Inc. and ROCCO Turkeys, Inc. (\$80,000).

Boyle, S.M., C.L. Cramer, **F.W. Pierson** (Co-I), G.G. Schurig, and N. Sriranganathan, 1994 (2yr). Expression of hemorrhagic enteritis virus genes in transgenic plants: vaccine bioproduction and delivery. USDA / Animal Health and Disease (\$9,550).

Pierson, F.W. (PI) and S.M. Boyle, 1995 (1yr). A genetically engineered vaccine for the control of hemorrhagic enteritis and salmonellosis in turkeys. ROCCO Turkeys, Inc. and Wampler-Longacre, Inc. (\$15,000).

Pierson, F.W. (PI), 1996 (1yr). Field service and applied research grant – continuation. Wampler-Longacre, Inc., and ROCCO Turkeys, Inc. (\$60,000).

Pierson, F.W. (PI) and R.M. Hulet, 1996 (1yr). Effect of PLT application on built-up turkey house litter on ammonia concentration and bacterial concentration. Jones-Hamilton Co. (\$11,000).

Sriranganathan, N., **F.W. Pierson** (Co-I), L. Warnick, C.T. Larsen, and J. M. Whichard, 1996 (2yr). Efficacy of bactericidal agents: decontamination of Salmonella on chicken skin. USDA / Hatch (\$11,740).

Pierson, F.W. (PI), N. Sriranganathan, and J. Whichard, 1997 (1yr) . Genomic characterization of Felix-O1 bacteriophage and its use as a biological salmonellacidal treatment for poultry skin. VMRCVM / Target Grant (\$1,800).

Pierson, F.W. (PI), C.T. Larsen, D. Emmerson, and J. Brake, 1997 (1yr). Poult enteritis mortality syndrome: multidisciplinary projects – 1997. Wampler Foods, Inc., and Shadybrook Farms, Inc. (\$42,000).

Pierson, F.W. (PI), N. Sriranganathan, and J. Whichard, 1997 (1yr). Salmonella decontamination of processed poultry meat: bacteriophage mediated reduction. Wampler Foods, Inc., and Shadybrook Farms, Inc. (\$16,000).

Duncan, R.B., **F.W. Pierson** (Co-I), S.M. Boyle, J. McQuiston, 1997 (1yr). Detection of virus latency in hemorrhagic enteritis virus infection in turkeys by polymerase chain reaction. VMRCVM / New Initiative (\$3,175).

Sriranganathan, N., **F.W. Pierson** (Co-I), J. Kobza, S. Jacobson, 1998 (2yr). Near on-line detection of food-borne Salmonella using KNAPSACK optimization: a pilot study. USDA / Hatch (\$6,100).

Elvinger, F., N. Sriranganathan, **F.W. Pierson** (Co-I), S. Altekruse, 1998 (2yr). Antimicrobial resistance of Campylobacter and Salmonella in turkeys on farms. USDA / Hatch (\$6,000). **Pierson, F.W.** (PI) and C.T. Larsen, 1998 (1yr). Hemorrhagic enteritis virus of turkeys: vaccine research and development. Wampler Foods, Inc., and Shadybrook Farms, Inc. (\$33,000).

Pierson, F.W. (PI), and C.T. Larsen, 1999 (3 yr). Field service and applied research grant. Shadybrook Farms, Inc., / Cargill Turkey Products, LLC (\$82,000).

Pierson, F.W. (PI), and C.T. Larsen, 2000 (2 yr). Field service and applied research grant. Pilgrim's Pride, Inc. (\$40,000).

Sriranganathan, N., **F.W. Pierson** (Co-I), J. Kobza, S. Jacobson, Near on-line detection of foodborne Salmonella using KNAPSACK optimization. Hatch / USDA (\$11,900).

Elvinger, F., N. Sriranganathan, **F.W. Pierson** (Co-I), and S. Altekruse, 1999 (1yr). Antimicrobial resistance of Campylobacter and Salmonella in turkeys on farms – continuation. Hatch / USDA (\$11,708).

Pierson, F.W. (PI), and N. Sriranganathan, 1999 (1yr) Bioremediation of Salmonella in poultry and poultry litter using bacteriophage Felix O1. ROCCO Summer Fellowship (\$7,192).

Sriranganathan, N., **F.W. Pierson** (Co-PI), and J.M. Whichard, 2000 (1yr). Sequencing of bacteriophage Felix O1. Research Focus Unit Fund (\$7,000).

Pierson, F.W. (PI) and C. Tirawattanawanich, 2000 (1yr). Effects of short chain fatty acids and dietary fiber on recovery from enteritis induced by turkey coronavirus. Carroll's Foods of Virginia (\$14,000).

Pierson, F.W. (PI), and C.T. Larsen, 2000 (2yr). Hemorrhagic enteritis virus of turkeys: vaccine research and development, Carroll's Foods of Virginia (\$30,000).

Sponenberg, D.P., and **F.W. Pierson** (Co-PI), 2001 (1yr). Documenting the immunological health of standard turkey varieties versus industrial turkey stocks, American Livestock Breeds Conservancy (\$4,700).

R.M. Gogal, **F.W. Pierson** (Co-PI) and C.T. Larsen, 2002 (2yr). Comparison of immunological profiles between commercial and standard/historic lines of turkeys, American Livestock Breed Conservancy, Southern Sustainable Agriculture Research and Education Program (\$68,000).

Meng, X.J., **F.W. Pierson** (Co-PI), and T.E. Toth, 2002 (2yr). Serological and molecular epidemiology of avian hepatitis E virus, an emerging virus causing hepatitis-splenomegaly syndrome in chickens. USDA / NRI (\$150,000).

Meng, X.J., **F.W. Pierson** (Co-I), T.E. Toth, and H.L. Shivaprasad, 2002 (4yr + 1 year extension). A chicken model for hepatitis E virus pathogenesis. NIH / NIAID - RO1 (\$868,000).

Pierson, F.W. (PI), 2002 (2yr). Field service and applied research grant – primary project: latency of hemorrhagic enteritis virus. Cargill Turkey Products, LLC. (\$66,750)

Pierson, F.W. (PI), 2002, C.T. Larsen, T. Beacorn, 2002 (2yr). Field Service and Applied Research Grant – Primary Project: Effect of Stress on Response to Hemorrhagic Enteritis Vaccination. Pilgrims Pride, Inc. (\$77,500).

Ruszler, P., **F.W. Pierson** (Co-PI), C. Novak, 2002 (2yr), Molting hens Using a non-fasting program compared to a 4-day fasting program and incidence of Salmonella Enteritidis in post-molt hens. U.S. Poultry and Egg Association (\$43,416.00).

Pierson, F.W. (PI), C.T. Larsen, S. Jennings, 2002 (1 yr). Field service and applied research grant - primary project: the combined effects of stress and vitamin C on response to hemorrhagic enteritis vaccine. Carroll's Foods of Virginia (\$27,500)

Elvinger, F., **F.W. Pierson** (Co-PI) 2002 (1.5yr). Epidemiological and Economic Assessment Study of the Performance of the Screening and Diagnostic Tests Used During Virginia's Low Pathogenic Avian Influenza Outbreak to Identify Infected Flocks. USDA (\$50,076).

Hovingh, E., **F.W. Pierson** (Co-PI), 2003 (1yr). Evaluation of an Alcohol-based, Waterless Hand Sanitizer in Petting Fair/Zoo and Large Animal Clinical Veterinary Hospital Environments. GOJO Industries (\$15,000).

Pierson, F.W. (PI), 2003 (1 yr). Hemorrhagic Enteritis Virus of Turkeys: Vaccine Research and Development. Carroll's Foods of Virginia (\$27,500).

Zajac, A. and **F.W. Pierson** (Co-PI), 2004 (3 yr). Pre-Clinical Laboratory Study: the Effectiveness of Avilamycin for the Prevention of Histomoniasis in Turkeys. ELANCO Animal Health (\$16,086).

Smith, E.J., **F.W. Pierson** (Co-PI), R.L. Pyle, D.P. Sponenberg, 2004 (2yr). Genetic Analysis of Induced Cardiomyopathy in Turkeys. Virginia Agriculture Council (\$58,102).

Pierson, F.W. (PI), 2005 (1yr). Field Service and Basic Research Grant: Basis for Variation in Virulence in THEV. Cargill Turkey Products, LLC (\$37,500).

Scheld, W., **F.W. Pierson** (Co-PI), and E. Martin, 2006 (1 yr). Prototype IC-H5 Vaccine against H5N1 Influenza, based on the tested IC-PA63 Vaccine platform Technology: Antibody Titers in a Poultry Model. Carilion Biomedical Institute (\$30,000).

Pierson, F.W. (Co-PI), and F. Elvinger, 2005 (2 yr). Agricultural Vulnerability Assessment Training Course. University of Tennessee, Center for Food Safety and Security / U.S. Department of Homeland Security (\$110,421).

Meng, X.J., **F.W. Pierson** (Co-I), F.F. Wang, 2006 (0.5 yr). Evaluation of the Effect of Riboflavin and Light Treatment on Hepatitis E Virus (HEV) Infectivity Using Avian HEV and Chicken as a Model System. Navigant Biotechnologies (\$63,021).

Pierson, F.W. (PI), 2006 (0.5 yr). Effect of Citric Acid and Poultry Water Treatment on Bacterial Counts in Water over Varying pH and Time. Jones Hamilton Corporation (\$4,500).

De Datta, S.K., R. Kenny, K. Subbiah, **F.W. Pierson** (Co-PI), F. Elvinger, 2007 (0.5 yr) Training for HPAI Preparedness and Response. CNA Corporation (\$42,453).

Pierson, F.W. (PI), R. Afifi, and G. Medani, 2007 (1 yr) Mycobacterium avium Complex Infection in Wild and Domestic Avian Species; An Evaluation of Live-Bird Detection Techniques and Vaccination. Egyptian Channel Program / Egyptian Cultural and Education Office (\$12,000).

Meng, X.J., **F.W. Pierson** (Co-I), T. LeRoith, and Y.W. Huang, 2008 (4 yr). A Chicken Model to Study HEV Pathogenesis. NIH / NIAID-2RO1 (\$1,266,300).

Pierson, F.W. (Co-PI), T. LeRoith, and N. Sriranganathan, 2008 (2 yr). Field Service and Research Grant: 1) Cellulitis in Turkeys 2) Bacteriophage Felix O1 Holin and Lysin as a Means of Salmonella Bioremediation. Cargill Turkey Products, LLC and Virginia Poultry Growers Cooperative (\$160,000).

McElroy, A., R. Dalloul, and **F.W. Pierson** (Co-PI), 2009 (2yr). Influence of Incubation Conditions on Turkey Poult Intestinal Development and Susceptibility to Poult Enteritis Mortality Syndrome. Virginia Agricultural Council (\$33,275).

Pierson, F.W. (PI), 2009 (3 yr). Training to Enhance Timely Sharing of Information and Intelligence on the Importation and Transportation of Food, Food Ingredients, and Animal Feed in the U.S. – Subcontract. U.S. Department of Homeland Security / Center for Agriculture, Food Security and Preparedness – University of Tennessee (\$123,610).

Pierson, F.W. (PI), 2009 (3yr). Training to Enhance Regional Collaboration and Utilize the National Credentialing Standards for Animal Emergency Responders to Effectively Manage All-Hazards Disaster Response and Recovery – Subcontract. U.S. Department of Homeland Security / Center for Agriculture, Food Security and Preparedness – University of Tennessee (\$120,000).

Ogejo, J., F. Agblevor, N. Franz, K. Stephenson, and **F.W. Pierson** (Co-I), 2009 (4yr). Integrated Education and Biodegradable Litter Amendment Development to Enhance Adoption of Ammonia Emissions Mitigation Practices in Poultry Houses. USDA-NRI (\$597,988).

Pierson, F.W. (PI), T. LeRoith, N. Sriranganathan, R. Evans, and D. Karunakaran, 2011 (2 yr). Characterization and Control of Diseases Responsible for Significant Losses to the Commercial Turkey Industry in the Shenandoah Valley, Cargill Turkey Products, LLC and Virginia Poultry Growers Cooperative. (\$185,250).

Ahmed, S., R.J. Avery, (Mentors: S.A. Ahmed, L. Li, Y.U. Li, C. Reilly, D. Caudell, X.J. Meng, **F.W. Pierson**, C. Roberts, E. Subbiah, L. Yuan, T. LeRoith, Z. Adelman, K. Miles, M. Ehrich, T. Hrubec, R. Prater, T. Inzana, N. Sriranganathan, S. Witonsky, J. Bassaganya-Riera, D. Good-Weidemer, M. Hulver, E. Schmelz, T. Swecker, E. Smith, W. Huckle, W. Eyestone, L. Dahlgren, J. Barrett, F. Elvinger. Summer Veterinary Research Program, 2011 (1 yr). Merial (\$20,000).

Meng, X.J., R.J. Avery, (Mentors: Z. Aldeman, S.A. Ahmed, J. Bassaganya-Riera, M. Ehrich, E. Subbiah, D.J. Good, T. Hrubec, M. Hulver, T. Inzana, L. Li, K. Myles, **F.W. Pierson**, C. Reilly, P.C. Roberts, E. Schmelz, E. Smith, N. Sriranganathan, L. Yuan). Animal model research for veterinarians, 2011 (5 yr) NIH T32 Training Grant (\$1,085,443)

Ahmed, S.A., R.J. Avery, (Mentors: Ahmed, L. Li, Y.U. Li, C. Reilly, D. Caudell, X.J. Meng, **F.W. Pierson**, C. Roberts, E. Subbiah, L. Yuan, T. LeRoith, Z. Adelman, K. Miles, M. Ehrich, T. Hrubec, R. Prater, T. Inzana, N. Sriranganathan, S. Witonsky, J. Bassaganya-Riera, D. Good-Weidemer, M. Hulver, E. Schmelz, T. Swecker, E. Smith. Summer Veterinary Research Program, 2011 (5 yr). NIH T35 Training Grant (\$183,310).

Pierson, F.W., N. Evans, and N. Sriranganathan, 2012, A mammalian model for testing the efficacy of an acute stress vaccination protocol for protection against acute and chronic tubercular lesions induced by *Mycobacterium avium*. 2012 (2 yr). VMRCVM Internal Research Grant (\$13,000).

Pierson, F.W., Characterization and Control of Diseases Responsible for Significant Losses to the Commercial Turkey Industry in the Shenandoah Valley – Supplemental, 2012 (1 yr) Cargill Turkey Products, LLC (\$47,500).

Meng, X.J., T. Leroith, **F.W. Pierson** (Co-I), L Yuan, A Chicken Model to Study Hepatitis E Virus Pathogenesis, 2013 (5 yr), NIH, RO1AI050611-Renewal (\$1,954,444).

Evans, N.P., **F.W. Pierson** (Co-PI), N. Sriranganathan. Investigation of Poultry Diseases Contributing to Economic Loss in the Shenandoah Valley and Control of Hemorrhagic Enteritis. 2013 (2 yr), Virginia Poultry Growers Cooperative (\$61,750).

Evans, N.P., **F.W. Pierson** (Co-PI), N. Sriranganathan. Continued Prevention of Hemorrhagic Enteritis in the Shenandoah Valley and Investigation of Diseases Contributing to Economic Loss. 2013 (2 yr), Cargill Turkey Products, LLC (\$190,000).

Evans, N.P., **F.W. Pierson** (Co-PI) N. Sriranganathan. Control of Hemorrhagic Enteritis in the Shenandoah Valley and Continued Research for Disease Prevention. 2015 (2 yr), Cargill Turkey LLC. and Virginia Poultry Growers Co-Operative (\$270,750).

Pierson, F.W. (PI), Systematic Review of 9 VAC 20-120 - Regulated Medical Waste Regulations and Recommended Changes to Ensure Proper Handling of Highly Infectious Materials. 2016 (1.5 yr) Virginia Department of Environmental Quality (\$125,000).

Pierson, F.W. (PI), H. Mahsoub (Co-I), D. Lindsay (Co-I) R. Dalloul (Co-PI), M. Persia (Co-I) Testing the efficacy of feed additives against *Cochlosoma anatis* infection in turkeys (test article screening. 2016 (1 yr), Butterball, LLC (\$18,000, VTF-Poultry Health Fund).

Pierson, F.W. (PI), H. Mahsoub (Co-I), D. Lindsay (Co-I) R. Dalloul (Co-PI), M. Persia (Co-I) Assessment of the Efficacy of Yucca and Oregano Feed Additives Against *Cochlosoma anatis* infection in turkey poults. 2017 (1 yr), Best Veterinary Solutions, Inc. (\$22,000, VTF Poultry Health Fund).

Pierson, F.W. (PI), H. Mahsoub (Co-I), A. Allison (Co-I), Hemorrhagic Enteritis Vaccine Research and Development 2017 (2 yr). Virginia Poultry Growers Association, LLC. (\$60,000, VTF-Poultry Health Fund)

Pierson, F.W. (PI), *Mycobacterium avium* subsp *avium* Prevalence in Raw and Survival in Cooked Egg Product. 2017 (1 yr), AH&D-IRC (\$3,000)

Persia, M. (PI), **F. W. Pierson** (Co-PI), Evaluation of alternative methods for the prevention and control of histomonosis (blackhead) in turkeys. 2017 (1 yr) 1 year, Virginia Agriculture Council (\$20,000).

SERVICE

Approximately 30-40% (with the exception of 2007-2014, and 2016-2018 as an administrator = 60%) of my time has been dedicated to service-related activities. During the early part of my academic career, this primarily entailed providing field service for the major poultry integrators in Virginia. I also assisted the turkey companies with the production of an avirulent, live vaccine for hemorrhagic enteritis. In recent years, due to changes in industry needs, I have spent less time "on the road" and instead, assist the companies with occasional outbreaks, disease monitoring and surveillance. Since the retirement of the University Poultry Extension Veterinarian in 2005, I have taken responsibility for providing backyard poultry owners with assistance. In 2002, I assumed the role of Biosecurity Coordinator / Infection Control Officer for Large Animal Hospital. In 2005, this expanded to the entire hospital. I was asked to serve as the interim director for the Veterinary Teaching Hospital in 2007 and took on the role as full time director in 2008-2014. In the fall of 2016, I was asked to serve as Interim Head of the Department of Biomedical Sciences and Pathobiology (currently still serving). These, as well as other services rendered to the College, University, state, and professional organizations are detailed below. Also included in this section is a description of consulting and international outreach activities.

FIELD SERVICE ACTIVITIES (1993-1998)

Early administrative experience was gained as the designated leader for the Avian Medicine Unit which was part of the Production Management Medicine Section of the Department of Large Animal Clinical Sciences. The unit originally consisted of 4 faculty. However by virtue of retirements, it ceased to be a "formal" unit in 2005. I continue to serve as the College of Veterinary Medicine's liaison to the poultry industry and aviculture interest groups in the Commonwealth of VA.

Field service was typically provided to the poultry industry on a contractual basis through the Field Service and Applied Research grants (see under sponsored programs). Services rendered to back-yard flock owners, game-bird operators, aviculturists, and pet bird owners have been on a fee-for-service basis. Consultative services provided by telephone or email were generally offered at no charge. I continue to handle poultry related calls and email inquiries for the College while in semi-retirement.

Our laboratory operated as both research and diagnostic facility. Standard services provided to the industry included, based on changing industry needs: necropsy, serology (ELISA for hemorrhagic enteritis virus, Newcastle, *Bordetella*; IFA for turkey coronavirus; plate agglutination MG, MS, MM; AGID for hemorrhagic enteritis virus), bacteriology (routine aerobic isolation and identification, *Mycoplasma* culture and PCR, *Bordetella* pathotyping), virology (PCR for hemorrhagic enteritis virus, astrovirus, stunting agent; FA for turkey coronavirus; avian influenza embryo inoculation), and preparation / interpretation of histopathology results. In general, our laboratories attempted to provide diagnostics that would otherwise be unavailable to the industry through the Virginia Department of Agriculture and Consumer Services (VDCS) lab in Harrisonburg. We also from time to time prepared diagnostic reagents and developed or tested new assays for transfer to the VDACs laboratory in Harrisonburg.

Diagnoses, treatment, and prevention recommendations were provided to clients in the form of verbal and written reports. Other services provided to the poultry industry include the development / maintenance of the Geographical Information System (GIS) for the two major production areas in Virginia (Shenandoah Valley, Southside) and assistance with the production of hemorrhagic enteritis vaccine. I also assist the Anatomic Pathology Service with avian necropsies submitted directly to the Virginia Tech Animal Laboratory System (ViTALS) and provide contextual interpretations of morphologic diagnoses.

As an adjunct to these activities, I served on the USDA Avian Influenza Task Force during the 2002 Virginia outbreak. My participation primarily involved interaction with the epidemiology group in the area of GIS and surveillance. I continue to be a member of the Virginia Poultry Disease Task Force.

I also assisted clients with the development of facility biosecurity plans. This was primarily for non-profit (501c3) animal shelters and was done pro-bono. For-profit entities engaged my services e.g., breeding kennels, on a fee-for-service basis.

BIOSECURITY COORDINATOR / INFECTION CONTROL OFFICER (2001-2018)

As Biosecurity Coordinator / Infection Control Officer for the Veterinary Teaching Hospital, I held a position on the Hospital Management Board. My duties included the development and implementation of biosecurity protocols, oversight of surveillance / quality assurance programs, biosecurity awareness / training and protocol compliance. I also performed investigations in the event of suspect nosocomial / hospital acquired infections and assisted with the development and implementation of appropriate response / mitigation strategies.

DIRECTOR, VETERINARY TEACHING HOSPITAL (2007-2014)

I served as interim Hospital Director 2007-2008 and full-time Director (2008-2014, 7.5 yrs). The following represents a broad description of my responsibilities.

In the capacity of Veterinarian-In-Charge (Chief Medical Officer), I served as the VTH's liaison with the general public and College's primary liaison with the Virginia Department of Health Professions / Board of Veterinary Medicine, Virginia Department of Agriculture and Consumer Services, Virginia Department of Health, Virginia Department of Emergency Management, and United States Department of Agriculture. I am licensed by the Virginia Board of Veterinary Medicine and, while director, with U.S Drug Enforcement Agency. In a regulatory sense, I supervised the VTH pharmacist and pharmacy operations. In addition to the clinician of record, I was legally responsible with regard to matters of patient care and was the institutional authority in terms of facility licenses / certification (AAHA), safety (Radiation Safety / Occupational Health and Safety), inspections and investigations.

As director, I reported directly to the Dean and served as a member of the Clinical Board, Executive Board and College Council. I chaired of the VTH Management Board and was responsible for organizing the agenda, facilitating the monthly / bi-monthly meetings, maintaining accurate minutes, and implementing Board decisions. It was my duty to ensure compliance with all University, College and VTH policies. I served as the final arbitrator in terms of conflict resolution e.g., client and referring DVM complaints, faculty, staff, and student grievances. I directly supervised the VTH Chief Financial Officer (CFO), Staff Supervisor for the Small Animal Hospital, Staff Supervisor for the Large Animal Hospital, Staff Supervisor for Diagnostic and Support Services, the Director of the Virginia Tech Animal Laboratory System (ViTALS), Pharmacist, Marketing / Referring DVM Relations Coordinator, Medical Records Auditor / Case Study Coordinator, and 1 administrative assistant. The VTH budget, fee schedule, public service (no-cost recovery) and benevolent funds, internal and external (University) auditing, and MOUs with the College of Agriculture and Life Sciences (CALS) and Virginia Department of Corrections also fell under my purview. I worked with the other College administrators and development personnel to formulate strategic plans for the College / Hospital and assemble needed funding.

DIRECTOR, CONTINUING EDUCATION (2007-2008)

In the role of Director of Continuing Education, I provided administrative oversight for the professional Continuing Education (CE) and outreach programs of the College. I worked with the Marketing / Referring DVM Relations Coordinator and CE Technical Coordinator to help

facilitate CE course offerings, served as the responsible party with regard to IACUC approval for animal use and procurement of controlled substances, and had the authority to award contact hours for CE on behalf of the College. I represented the College on the University Outreach Council.

INTERIM HEAD, DEPARTMENT OF BIOMEDICAL SCIENCES AND PATHOBIOLOGY (2016-2018)

As interim head (November 2016 - April 2018), I was responsible for maintaining the operational continuity of the department i.e., financials, faculty evaluations, assisting faculty with their preparations for reappointment, promotion and tenure, implementing the faculty hiring plan, serving as an advocate for the department with the Associate Deans for Research and Graduate Studies and Academic Affairs, and representing the department on the Operations Board and Executive Board.

EXTENSION, OUTREACH, CONTINUING EDUCATION, AND INVITED PRESENTATIONS

The Interaction of Hemorrhagic Enteritis virus and *E. coli*. Virginia Poultry Health and Management Seminar. April 13, 1988, Roanoke, VA.

Controlling Colibacillosis by Vaccination Against Hemorrhagic Enteritis. ROCCO Turkeys, Inc. - Grower's Meeting, Mt. Crawford, VA, March 28, 1989.

Ibid. Franklin, WV, March 29, 1989.

Ibid. Timberville, VA, April 5, 1989.

Ibid. McGagheysville, VA, April 24, 1989.

Controlling Colibacillosis. Virginia Turkey Days Educational Program, Harrisonburg, VA, December 12, 1989.

Techniques for the Isolation and Identification of *Bordetella avium*. Association of Veterinary Microbiologists - Colonial States Chapter, Williamsburg, VA. November 3, 1989.

Making the Most of Your H.E. Vaccination Program. Pennsylvania Turkey Conference, New Oxford, PA, March 22, 1990.

Avian Bordetellosis: Diagnosis, Management, and Prevention. Virginia Poultry Health and Management Seminar, Roanoke, VA, April 18, 1990.

Education in Avian Medicine. Sunbelt Veterinary Conference, Blacksburg, VA, June 7-9, 1991.

The Effect of Water Quality on the Effectiveness of Vaccines and Medications (co-presenter - C.T. Larsen). Virginia Poultry Health and Management Seminar, Roanoke, VA, April 14-15, 1992.

Diseases of Turkeys 0 to 3 Weeks-of-Age (Continuing Education Series for Poultry service-persons). ROCCO Turkeys, Inc., Wampler-Longacre Turkey, Inc., Harrisonburg, VA, July 30, 1992.

Ibid. Harrisonburg, VA, July 31, 1992

Ibid. Harrisonburg, VA, August 13, 1992.

Ibid. Harrisonburg, VA, August 14, 1992.

Ibid. Harrisonburg, VA, September 10, 1992.

Ibid. Harrisonburg, VA, September 11, 1992.

Diseases of the Brooding and Growout Period (4-12 wks) (continuing education series for poultry service-persons). ROCCO Turkeys Inc., Wampler-Longacre, Inc., Harrisonburg, VA March 11, 1993.

Ibid. Harrisonburg, VA, March 26, 1993.

Ibid. Harrisonburg, VA, August 5, 1993.

Ibid. Harrisonburg, VA, August 27, 1993.

The avian medicine program at Virginia Tech. Commonwealth Avicultural Society, Richmond, VA, August 15, 1993.

How Multiple Environmental Challenges Effect Your Performance (Turkeys). Pennsylvania / Virginia Turkey Days, Mechanicsburg, PA, October 13, 1993.

Diseases of the Finishing Period (12 wks to market) (continuing education series for poultry service-persons)". ROCCO Turkeys Inc., Wampler-Longacre, Inc. Harrisonburg, VA, October 28, 1993.

Ibid. Harrisonburg, VA, November 5, 1993.

The Avian Medicine Program at Virginia Tech - banquet address. The Bird Clubs of Virginia, 10th Annual Convention, Norfolk, VA, April 9-10, 1993.

Ibid. Feather Fanciers of Fredericksburg, Fredericksburg, VA, May 10, 1994.

How Multiple Environmental Challenges Effect Your Performance (Turkeys). Grower Education Meeting, ROCCO Turkeys, Inc., Franklin, WV, April 26, 1994.

Ibid. Broadway, VA, May 3, 1994.

Ibid. Dayton, VA, May 9, 1994.

How Multiple Environmental Challenges Effect Your Performance (Broilers and Broiler Breeders). Virginia Poultry Health and Management Seminar, Roanoke, VA, April 12-13, 1994.

Disease Discussion Panel: Turkey Session. Virginia Poultry Health and Management Seminar, Roanoke, VA, April 12-13, 1994.

Integumentary Diseases of Pet Birds. Commonwealth Avicultural Society, Richmond, VA, August 21, 1994.

How Multiple Challenges Affect Poult Performance. Virginia / Pennsylvania Turkey Days, Harrisonburg, VA, October 12, 1994.

Taking the Mystery out of MIC's. Pacesetter Conference, National Turkey Federation Annual Convention, Orlando, FL, January 10, 1995.

Care and Feeding of Cockatiels. Giles Memorial Hospital - Intermediate Care Facility, Pearisburg, VA, August 18, 1995.

In-state admissions requirements - non-academic, veterinary / animal experience. Admissions Workshop, Virginia-Maryland Regional College of Veterinary Medicine, Blacksburg, VA, Sept 7, 1995.

Avian Medicine Program at Virginia Tech. Peninsula Caged Bird Society, Hampton, VA, Sept. 17, 1995.

Ibid. Tri-state Bird Club, Winchester, VA, October 8, 1995.

Principles of Biosecurity: Broiler Breeders and Breeder Replacements, West Virginia Poultry Festival, Moorefield, WV, July 24, 1996.

Proper Posting and Sampling Techniques. Poultry Health and Management Seminar, Roanoke, VA, April 15, 1997.

Biosecurity: A Growers Approach. Virginia / Pennsylvania Turkey Days, Harrisonburg, VA, June 11, 1997.

IFA Test for Diagnosis of Turkey Coronavirus Infection. Workshop conducted for VDACS laboratory personnel, Harrisonburg, VA, January, 1998.

Biosecurity: Principles and Practice. Poultry Production and Nutrient Management Symposium, Virginia Cooperative Extension, Harrisonburg, VA, March 30, 1998.

Biosecurity: Principles and Practices in the Commercial Poultry Industry. Second International Conference on Recirculating Aquaculture, Roanoke, VA, July 16-19, 1998.

The Role of Biosecurity in the Control of Poult Enteritis Mortality Syndrome. West Virginia Poultry Festival, Franklin, WV, July 23, 1998.

Proper Post-mortem Examination and Sample Collection for the Diagnosis of Poult Enteritis Mortality Syndrome (PEMS) - Workshop for Veterinary and Service personnel. Shadybrook Farms, Inc., Harrisonburg, VA, August 6, 1998.

The Nature of Disease. Seminar Series - Concord College, Athens, WV, October 26, 1998.

Biosecurity: a plan for action. 2nd Annual Poultry Production and Nutrient Management Symposium, Mt Crawford, VA, March 19, 1999.

Effect of Coronavirus on performance. Pennsylvania Sales and Service Meeting, Grantville, PA, April 7, 1999.

ORT (Ornithobacterium rhinotracheale). Virginia Poultry Health and Management Seminar, Roanoke, VA, May 12, 1999.

Enteric Disorders of the Poult. 10th Annual Elanco Turkey Technical Seminar, August 1999, Indianapolis, IN.

Virginia Poultry Disease and Research Update. 14th Regional Meeting on Practical Biosecurity for Poultry: Reducing Disease and Improving Livability, Mid Atlantic Cooperative Extension Poultry Health and Management Unit, Newark, DE, December 7, 1999.

Genetic x Nutrition x Management x Vaccination = Response to Disease Challenge or How Multiple Factors Influence the Outcome of Disease Challenge in Turkeys. Workshop: Influence of Environmental Factors on Poultry Health, American College of Poultry Veterinarians, Sacramento, CA, March 4, 2000.

Enteric Disorders of the Poult. Arkansas Poultry Symposium, Springdale, AR, April 11-12, 2000.

Water Disinfection: A Method to the Madness. Virginia Poultry Health and Management Seminar, Roanoke, VA, April 25-26, 2000.

GIS: the rubber finally meets the road. Virginia Poultry Health and Management Seminar, Roanoke, VA, April 17-18, 2001.

Poult Performance and Enteric Diseases. 4th Annual Poultry Production and Nutrient Management Symposium, Weyers Cave, VA, October, 30, 2001.

Use of Geographical Information Systems for Disease Monitoring. Workshop: Getting More Out of Production and Health Data, American College of Poultry Veterinarians, Athens, GA January 15, 2002.

Use of Geographical Information Systems - Lab. Workshop: Getting More Out of Production and Health Data, American College of Poultry Veterinarians, Athens, GA, January 15, 2002.

Challenges in Controlling Avian Influenza in Virginia. Delmarva Breeder, Hatchery, and Grow-out Conference, Delmar, MD, September 11, 2002.

AI Biosecurity and Status Report: Challenges in Controlling Avian Influenza (Low Path) in Virginia. US Poultry and Egg Association - Poultry Production and Health Seminar, Sept 18, 2002, Memphis TN.

Understanding Poult Enteritis. 31st Annual Poultry Health Conference, Ontario Poultry Industry Council for Research and Education, November 12, 2002, Kitchener, Ontario, Canada.

Avian Influenza: Issues Faced in the 2002 Virginia Outbreak. 31st Annual Poultry Health Conference, Ontario Poultry Industry Council for Research and Education, November 12, 2002, Kitchener, Ontario, Canada.

Ibid. Producers Meeting, Ontario Egg Board - Zone 1, Feb 18, 2003, Watford, Ontario, Canada.

Ibid. 20th Annual General Meeting of the Ontario Broiler Hatching Egg and Chick Commission, Feb 19, 2003, Guelph Ontario, Canada.

Ibid. North Atlantic Poultry Health and Management Conference, Mar 26, 2003, Portsmouth, NH.

Cochlosoma Infection in Turkeys: Cochlosomiasis or Cochlosomosis. 2003 ELANCO Turkey Technical Seminar, August 21-22, 2003, Raleigh, NC.

Cochlosoma Detection and Treatment: Cochlosomiasis or Cochlosomosis. Pennsylvania Poultry Sales and Service Conference, September 18-19, 2003, State College, PA.

Avian Influenza and Newcastle Disease: Old Game, Big Stakes, New Rules. Virginia Gamefowl Breeders Association – Annual Meeting, September 27, 2003, Lynchburg, VA.

Incubation and Hatching. Guinea Fowl Breeders Association Spring Meeting, March 19-21, 2004, Blacksburg, VA.

Avian Influenza and Newcastle Disease. Guinea Fowl Breeders Association Spring Meeting, March 19-21, 2004, Blacksburg, VA.

Cochlosoma: Diagnosis, Treatment, Control, and Prevention, 2004 Poultry Health and Management Seminar, April 13-14, 2004, Roanoke, VA.

Preventing the Spread of Coronavirus. North Atlantic Poultry Health and Management Conference, May 11-12, 2004, Grantville, PA.

Common Avian Diseases. Governor's School for Agriculture, July 7, 2004, Blacksburg, VA.

Emergency Preparedness. Virginia Veterinary Conference / Virginia Academy of Food Animal Practitioners, (co-speaker with F. Owens, USDA), February 3-6, 2005, Roanoke, VA.

Marmot, It's What's For Dinner. VMRCVM Alumni Reunion, August 20-21, 2005, Blacksburg, VA.

Overview of Respiratory Disorders of Turkeys, Virginia Poultry Health and Management Seminar, April 12-13, 2005 Roanoke, VA.

Biosecurity for Gamefowl Breeders. Virginia Gamefowl Breeders Association –A nnuual Meeting, September 25, 2005, New London, VA.

Avian Influenza: Agricultural Vulnerability and Preparedness. Shenandoah County Board of Supervisors, Open Meeting March 7, 2006, Woodstock, VA.

Raising Heritage Turkeys and other Poultry on Pasture: Health Issues, Sustainable Agriculture Research and Education Professional Development Program, VCES In-Service Training, February 16, 2006, Lynchburg, VA.

Raising Heritage Turkeys and other Poultry on Pasture: Health Issues. Virginia Biological Farming Conference, February 17, 2006, Lynchburg, VA.

Avian and Human Influenza: A Risk of Pandemic? Emerging and Re-Emerging Infectious Diseases of Man and Animals (CE Course), April 22, 2006, Blacksburg, VA.

Avian and Human Influenza. Environmental Health and Safety Services, Virginia Tech, June 6, 2006, Blacksburg, VA.

Avian Influenza. Pandemic Influenza Summit, Lord Fairfax Health District, Virginia Department of Health, June 22, 2006, Shenandoah University, Winchester, VA.

Ibid. Annual Meeting of the Carolina-Virginia Pheasant and Waterfowl Society, July 25, 2006, White Gate, VA.

Avian and Human Influenza: The Threat of a Pandemic. Avian Influenza Conference, Lord Fairfax Health District. Virginia Department of Health, July 28, 2006, Front Royal, VA..

Ibid. Concord University (BIOL Seminar). September 8, 2006, Concord, WV.

Briefing on H5N1 Avian Influenza and Homeland Security, House Appropriations Higher Education Subcommittee, October 27, 2006.

Avian and Human Influenza: The Threat of a Pandemic. Near-Southwest Virginia Pandemic Flu Preparedness Conference. New River Health District, Virginia Department of Health, October 31, 2006, Blacksburg, VA.

Ibid. Valley Health Fall Respiratory Conference, Valley Health – Winchester Medical Center, November 6, 2006, Winchester, VA.

Current State of Avian Flu, Henrico County Pandemic Flu Summit, August 3, 2007, Richmond, VA.

Turkey Diseases: Highlights for 2007. Virginia Poultry Health and Management Seminar. Rockingham Poultry Serviceman's Committee, Virginia Tech Department of Animal and Poultry Sciences, August 28-29, 2007, Roanoke, VA.

Effectively Managing Your HE Vaccination Program. Pennsylvania Poultry Sales and Service Conference. September 18-20, 2007, Lancaster, PA.

Disaster Preparedness - The Development of a State Animal Response Team (SART) in Virginia and a Community Animal Response Team At Virginia Tech. Lisa Tedora Memorial Lecture, November 13, 2007, Blacksburg, VA.

Principles of Biosecurity, Virginia Veterinary Reserve Corps Training Meeting, November 15, 2007, Richmond, VA.

Principles of Biosecurity (Avian Influenza), Avian Influenza Preparedness and ICS training Workshop for Caribbean Nations, Inter-American Institute for Cooperation on Agriculture, November 22-26, 2007, Miami, FL.

Avian Influenza: The Virginia Experience, Avian Influenza Preparedness and ICS training Workshop for Caribbean Nations, Inter-American Institute for Cooperation on Agriculture, November 22-26, 2007, Miami, FL.

Farm Biosecurity. Dairy Industry Workshop. Virginia Dairy Association, Virginia Department of Agriculture and Consumer Services, Virginia Cooperative Extension Service, March 19-20, 2008, Staunton, VA.

Poult Immunodeficiency Pancreatitis Syndrome (PIPES), Pennsylvania Poultry Sales and Service Conference, The Pennsylvania State University, September 17, 2008, State College, PA.

ORT (Ornithobacterium rhinotracheale), Virginia Poultry Health and Management Seminar, The Rockingham Poultry Serviceman's Committee / Virginia Cooperative Extensions Service, April 16, 2009, Weyer's Cave, VA.

The Veterinary Teaching Hospital – From Head to Tail, Avrum Gedulsky Center, University of Maryland, College Park, MD, April 22, 2010.

Practical Strategies for Hardening Agricultural Targets, Virginia Agroterrorism Working Group, Richmond, VA, May 4, 2010.

Alternatives to Antibiotics: Rethinking Therapeutics. NECAD Symposium – 82nd Northeastern Conference on Avian Diseases, State College, PA, September 22-23, 2010.

Agriculture and Food Vulnerability Assessments. Virginia Agroterrorism Conference, Weyer's Cave, VA, March 23, 2010.

The Veterinary Teaching Hospital – From Head to Tail, Avrum Gedulsky Center, University of Maryland, College Park, MD, April 22, 2010.

Practical Strategies for Hardening Agricultural Targets, Virginia Agroterrorism Working Group, Richmond, VA, May 4, 2010.

Using Vulnerability Assessments to Improve Agro-Security, Virginia Agricultural Development Officers Meeting, Agriculture and Forestry Development Services, Virginia Department of Agriculture and Consumer Services, Amherst, VA, November 10, 2010.

Poultry Production in the US – Integration, Infrastructure, Markets and Vulnerabilities. Federal Bureau of Investigation (FBI) Agrosecurity Training Program, Southwest Border Food Safety and Defense Center, New Mexico State University, Las Cruces, NM, Dec 13-17, 2010.

Addressing Vulnerabilities in the Food Transportation Sector. Third Annual Virginia Agroterrorism Conference, Virginia Department of Agriculture, Federal Bureau of Investigation, Virginia Center for Policing Innovations, and the Virginia-Maryland Regional College of Veterinary Medicine. Blacksburg, VA, February 4, 2011.

Hemorrhagic Enteritis Vaccination of Turkeys, American College of Poultry Veterinarians, Sacramento., CA, March 20, 2011.

Life and Death in a Poultry Flock: The Battle for Resources, 2011 Virginia Poultry Health and Management Seminar, Weyer's cave, VA, April 12, 2011.

Riding the Dinosaur or Not: Darwinism and the Traditional VTH, 2011 Association of Veterinary Advancement Professionals, St. Louis, MO, July 17-19, 2011.

Economic Considerations in Determining When to Medicate. NECAD Symposium, 83rd Northeastern Conference on Avian Diseases, Lancaster, PA, September 21-22, 2011.

Managing Methicillin Resistant Staph in Your Hospital, Potomac Regional Veterinary Conference, Washington, D.C., November 11-13, 2011.

Emerging Public Health Concerns. NECAD Symposium – Diseases of Public Health Significance, 84th Northeastern Conference on Avian Diseases, State College, PA, September 26-27, 2012.

Clostridial Dermatitis/Cellulitis Update, Pennsylvania Poultry Sales and Service Conference – Turkey Session, State College, PA September 27, 2012.
Hospital Biosecurity Programs – Reduce Risk and Enhance Profitability, Potomac Regional Veterinary Conference, Arlington, VA., September 28-30, 2012.

Common Diseases of Poultry, Virginia Cooperative Extension Service, Prince Edward Co., Farmville, VA, December 15, 2011.

Ibid, Virginia Cooperative Extension Service, Prince Edward Co., Farmville, VA, January 26, 2012.

Ibid, Virginia Cooperative Extension Service, Prince Edward Co., Farmville, VA, May 4, 2012.

Ibid, Sustainable Poultry Network, Salisbury, NC, October 2, 2012

Hemorrhagic Enteritis Vaccination of Turkeys, University of Minnesota Turkey Health School, St. Paul, MN, April 8-9, 2013.

Gangrenous Dermatitis / Cellulitis, 2013 Virginia Poultry Health and Management Seminar, Weyer's Cave, VA, May 15, 2013.

Ibid, 2013 North Carolina Turkey Days, Wilmington, NC, October 2, 2013.

Hemorrhagic Enteritis Vaccination of Turkeys, Symposium - Vaccinology, 85th Northeastern Conference on Avian Diseases, Lancaster, PA, September 18-19, 2013.

Food Security: Risk Management on Multiple Fronts, 2014 Virginia Agroterrorism Conference, Smithfield, VA, April 29, 2014.

Common Disorders of Backyard Poultry, Fifth Annual Potomac Regional Veterinary Conference, White Sulphur Springs, WV, November 13-15, 2015

Agroterrorism and the Art of War, Fifth Annual Potomac Regional Veterinary Conference, White Sulphur Springs, WV, November 13-15, 2015.

Standard of Care: The Necessity of a Formalized Infection Control Plan, Fifth Annual Potomac Regional Veterinary Conference, White Sulphur Springs, WV, November 13-15, 2015

Backyard Poultry Health in a Nutshell, Fifth Annual Equine & Food Animal Conference for Veterinarians, VMCVM, Blacksburg, VA, January 8, 2016.

Common Disorders of Backyard Poultry, 2016 Virginia Veterinary Conference, Roanoke, VA, February 25-27, 2016.

Agroterrorism and the Internet of Things, Geography Colloquium, Virginia Tech, Blacksburg, VA, September 16, 2016.

Biosecurity / Biosafety: A Practical Approach to IC&P, Potomac Regional Veterinary Conference, White Sulfur Springs, WV, October 25-27, 2019.

Common Husbandry and Health Issues in Small Poultry Flocks. Potomac Regional Veterinary Conference, White Sulfur Springs, WV, October 25-27, 2019.

Practitioner's Brief: Human health concerns related to small poultry flocks. 2020 AVMA Virtual Convention, August 20-22, 2020.

SHORT COURSES

Agriculture and Food Vulnerability Assessment Training Course, Center for Agriculture, Food Security and Preparedness, U.S. Department of Homeland Security, Federal Emergency Management Agency, Office of Grants and Training / University of Tennessee.

Knoxville, TN, December 12-14, 2006
Tulare, CA, January 30 - February 1, 2007
Charleston, WV, June 12-14, 2007
Richmond, VA, November 18-20, 2008
Richmond, VA, January 6-8, 2009

Use of a Standardized National Credentialing Program for Management of an Animal Emergency Response, Instructor, U.S. Department of Homeland Security, Federal Emergency Management Agency, Office of Grants and Training / Center For Agriculture, Food Security and Preparedness, University of Tennessee.

Knoxville, TN, April 27-28, 2010
Las Cruces, NM, July 13-14, 2010
Richmond, VA, August 16-17, 2010
Wichita, KS, April 29-30, 2011
Ft. Lauderdale, FL, May 17-18, 2011

Indianapolis, IN, May 25-26, 2011
Centennial, CO, July 28-29, 2011
Knoxville, TN, August 17-18, 2011

An Introduction to Effective Sharing of Information and Intelligence Related to the Importation and Transportation of Food, Instructor, U.S. Department of Homeland Security, Federal Emergency Management Agency, Office of Grants and Training. / Center For Agriculture, Food Security and Preparedness, University of Tennessee.

Knoxville, TN, June 29, 2010
Richmond, VA, August 18, 2010
Las Cruces, NM, March 28, 2011
Albuquerque, NM, March 30, 2011
Indianapolis, IN, May 24, 2011
Charleston, WV, June 28, 2011
Oakridge, TN, September 7, 2011

Animal-Plant Health Joint Criminal-Epidemiological Investigations Course, Federal Bureau of Investigation and United States Department of Agriculture

Las Cruces, NM, December 13-14, 2016
Auburn, AL, May 15-18, 2017.

EXTENSION, OUTREACH, AND CONTINUING EDUCATION MEETINGS ORGANIZED

71st Northeastern Conference on Avian Diseases (NECAD). In the past, the conference has rotated annually among Land Grant Universities in the Northeastern U.S. Held at the VMRCVM in Blacksburg, VA, June 16-18, 1999. Served as Conference Chair as well as chair of local planning committee (C. Larsen, J. Whichard, and M.E. Pierson). Organized symposium and scientific sessions, produced mailings, assisted in the development of website, arranged for meeting facilities, meals, on-campus housing, solicited corporate sponsors, administered, edited and published proceedings, administered finances.

Virginia-Pennsylvania Turkey Days - Program Committee, Member, 1998.

Annual Virginia Poultry Health and Management Seminar - Program Committee, Member, 1998-2006

75th Northeastern Conference on Avian Diseases (NECAD), Secretary / Program Committee, 2002-2003. Assembled and published a CD of all of the conference proceedings dating back to 1928.

Guinea Fowl Breeders Association, March 19-21, 2004, Blacksburg, VA; assisted with meeting organization and programming.

Hurricane Lessons Learned Conference (Sponsored by VMRCVM and USDA/APHIS) - Planning Committee, Member, 2006.

79th – 85th (7 Meetings) Northeastern Conference on Avian Diseases (NECAD), Conference Chair and Secretary / Programming Committee. Facilitated merger of the NECAD with the Pennsylvania Poultry Sales and Service Conference, organized NECAD symposium and scientific meeting, prepared electronic mailings, edited and published proceedings, administered finances, 2006-2013.

Virginia Agroterrorism / Agrosecurity Conference (4 Meetings) , Member, Organizing Committee, 2010, 2012, 2014, 2015.

ROUNDTABLES AND TOWN HALL MEETINGS (RELATED TO HOSPITAL SERVICE)

Roundtable, West Virginia Veterinary Medical Association, Greenbrier Meeting, Lewisburg, WV, 2009.

Roundtable, Piedmont Veterinary Medical Association, Lynchburg, VA, 2010.

Roundtable, West Virginia Veterinary Medical Association, Greenbrier Meeting, Lewisburg, WV, 2010.

Roundtable, Virginia Veterinary Medical Association, Winter Meeting, Roanoke, VA, 2010.

Town Hall Meeting, Virginia Veterinary Medical Association, Winter Meeting, Roanoke, VA, 2010.

Roundtable, West Virginia Veterinary Medical Association, Pipestem Meeting, Athens, WV 2010

Roundtable, Virginia Veterinary Medical Association, Winter Meeting, Roanoke, VA, 2011.

EXTENSION PUBLICATIONS, POPULAR PRESS, RADIO AND TELEVISION INTERVIEWS, AND EXPERT OPINIONS

A Growers Guide to Controlling Colibacillosis in Turkeys. Pamphlet, Virginia-Maryland Regional College of Veterinary Medicine, 1989.

Mycoplasmosis in Wild Finches. Written report for distribution provided to University / Public Relations, VMRCVM, October 24, 1994.

Mycoplasmosis in Wild Finches. Written report provided to the Daily Press / Newport News, VA, by request, October 27, 1994.

The Avian Medicine Program at Virginia Tech. Videotape prepared by VMRCVM for distribution to local affiliates of the Bird Clubs of Virginia, 1995.

Regional Poultry Program. Radio interview given to the Virginia Farm Bureau, August 6, 1996.

The DELMARVA Poultry Health Initiative. Press conference, F.A.C.T. Conference, Blacksburg, VA, April 24, 1997.

Three States Join to Protect Poultry Industry - Poult Enteritis Mortality Syndrome and the Regional Poultry Health Initiative. Telephone interview, Harrisonburg Daily News-Record, 1997.

"Bird in the Hand..." Telephone interview, Richmond Times Dispatch for feature story regarding work done for a client in Richmond, 1997.

Should Pheasants (free flight / range) Be Raised in Close Proximity to Commercial Turkeys. Expert opinion (written) provided to Shadybrook Farms, Inc., March 9, 1998.

Response to Inquiries Regarding Zoonotic Diseases Transmissible from Poultry. Expert opinion (written) provided to the Sussex and Southampton County Boards of Commissioners, 1998.

Documented Occurrences of Zoonotic Outbreaks Associated with Egg Layer Operations - supplemental information. Expert opinion (written) provided to the Sussex and Southampton County Boards of Commissioners, 1998.

A Small Flock Owners Guide to Avian Influenza, Pamphlet, Virginia-Maryland regional College of Veterinary Medicine, Virginia Cooperative Extension Service, 2002

A Small Flock Owners Guide to Avian Influenza, Visual display sponsored by Virginia Cooperative Extension Service at Augusta, Amelia, Page, Rockingham, Shenandoah Co. Fairs, August-September, 2002.

A Small Flock Owners Guide to Avian Influenza, Pamphlet, Virginia-Maryland Regional College of Veterinary Medicine, 2006 (update).

Avian Influenza. Telephone interview, Atlantic Monthly Magazine, 2006.

Avian Influenza. Telephone interview, Training and Conditioning Magazine, 2006.

Avian Influenza, Telephone interview, Richmond Times Dispatch, 2006.

Agroterrorism and Threats to the Commonwealth of Virginia, National Public Radio, 2008

Veterinary Infection Control Plans - More Than Just Standard of Care, Virginia Department of Health - One Health Notes, Vol 1(1), January, 2016.

Things Aren't Always What They Seem, Virginia Department of Health - One Health Notes, Vol 1(2), April, 2016.

Salmonella: What Goes Around Can Come Around, Virginia Department of Health - One Health Notes, Vol 1(3), July, 2016.

Murmurations, Virginia Department of Health - One Health Notes, Vol 1(4), October, 2016.

OTHER PUBLICATIONS (as Co-Author)

Thompson, S.R., R. Burden, F. Hopkins, R. Linnaberry, J. Jared, C. Barker, **F. W. Pierson**, J. Witte, B. Dictson, K. Hamilton, 2010. Use of a Standardized National Credentialing Program for Management of an Animal Emergency Response – *Instructor Manual* (Training Support Package). Center for Agriculture, Food Security and Preparedness, University of Tennessee / U.S. Department of Homeland Security, Federal Emergency Management Agency, Office of Grants and Training.

Thompson, S.R., R. Burden, F. Hopkins, R. Linnaberry, J. Jared, C. Barker, **F. W. Pierson**, J. Witte, B. Dictson, K. Hamilton, 2010. Use of a Standardized National Credentialing Program for Management of an Animal Emergency Response – *Participant Manual* (Training Support Package). Center for Agriculture, Food Security and Preparedness, University of Tennessee / U.S. Department of Homeland Security, Federal Emergency Management Agency, Office of Grants and Training.

Thompson, S.R., R. Burden, F. Hopkins, R. Linnaberry, A. Draughon, C. Barker, **F. W. Pierson**, J. Witte, B. Dictson, R. Silver, K. Hamilton, 2010. An Introduction to Effective Sharing of Information and Intelligence Related to the Importation and Transportation of Food – *Instructor Manual* (Training Support Package). Center for Agriculture, Food Security and Preparedness, University of Tennessee / U.S. Department of Homeland Security, Federal Emergency Management Agency, Office of Grants and Training.

Thompson, S.R., R. Burden, F. Hopkins, R. Linnaberry, A. Draughon, C. Barker, **F. W. Pierson**, J. Witte, B. Dictson, R. Silver, K. Hamilton, 2010. An Introduction to Effective Sharing of Information and Intelligence Related to the Importation and Transportation of Food – *Participant Manual* – Training Support Package. Center for Agriculture, Food Security and

Preparedness, University of Tennessee / U.S. Department of Homeland Security, Federal Emergency Management Agency, Office of Grants and Training.

SERVICE TO THE COLLEGE AND UNIVERSITY

COMMITTEES

Poultry Advisory Committee, Chair, VMRCVM, 1993-1994.

Admissions and Standards Committee, Member, VMRCVM, 1993-1996.

Avicultural Advisory Committee, Chair, VMRCVM, 1994-1995.

Virginia Admissions Interview Team, Member, VMRCVM, 1994.

Research Lab Space Study Committee, Member, VMRCVM, 1994.

Maryland Admissions Interview Team, Member, VMRCVM, 1995-1996.

Ad-Hoc Committee, Regional Poultry Health Program Committee, Member, 1995-1998.

Search Committee, Clinical and Food Safety Epidemiology Positions, Member, VMRCVM (College Park, MD), 1996-1997.

Search Committee, Extension Poultry Veterinarian Position, Member, VMRCVM (College Park, MD) 1996.

Search Committee, Extension Specialist in Poultry Food Safety and Quality, Department of Food Science and Technology, Member, 1997-1998.

Search Committee - Associate Dean of Academic Affairs, Member, VMRCVM, 1997.

Working Group, Development of Fund for Rural America - Center for Pre-harvest Food Safety Proposal, Member, VMRCVM (College Park, MD), 1997.

Production Management Medicine and Food Safety Research Focus Group, Member, VMRCVM, 1997-2002.

College Library Committee, Member, VMRCVM, 1998-2004, Chair 2002

Steering Committee, Regional Poultry Health Initiative, Member, 1999-2002.

Departmental Promotion and Tenure Committee, DLACS, Member, 1999-2002, 2004-200, Chair, 2000.

Search Committee, Poultry Nutritionist, Department of Animal and Poultry Sciences, , Member, 1999.

Search Committee, Department Head, Department of Food Science and Technology, Member, 1999.

College Diversity Committee, Member / departmental representative, VMRCVM, 2000-2004.

Institutional Animal Care and Use Committee (IACUC), Member / departmental representative, 2000-2004.

Food, Nutrition, and Health Cross-cutting Initiative, Participant, 2000-2002.

Virginia Poultry Disease Task Force, GIS database co-coordinator, Member, 2002-2018

Veterinary Teaching Hospital Management Board, Member, 2002-2007, Chair (as Hosp Director) 2007-2014.

At-Large (out-of-state) Admissions Interview Team, Member, 2002, 2004.

VMRCVM Safety / Biosafety Task Force, Member, 2003

College Biosafety Committee, Chair, 2005-2010.

Search Committee, 2 positions, food safety / microbiology / host pathogen interaction, Department of Food Science and Technology, Member, 2005

Search Committee, Host pathogen interaction / gastrointestinal health, Department of Animal and Poultry Science, Member, 2006

Faculty Coordinator, Rabies Immunization and Monitoring Program, VMRCVM, 2006-2009

AAALAC Implementation Committee (AIC), VMRCVM, Member, 2006-2008.

AAALAC Employee Health Monitoring Program Subcommittee, Member, 2006.

University Biosecurity / Biodefense Research Exploratory Group, National Capitol Regional Campus, Member, 2006-2007.

College Clinical Board, VMRCVM, Member, 2007-2014.

College Executive Board, VMRCVM, Member, 2007- 2014, 2016-2018.

College Council, VMRCVM, Member, 2007- 2014.

University Outreach Council, VMRCVM Representative, 2007- 2014.

Institutional Biosafety Committee (working-group), Member, 2007-2008.

Board of Directors, Virginia State Animal Response Team (SART), VMRCVM Representative, 501c3, 2007-2012.

VMRCVM Volunteers, Virginia Emergency Operations Center (VEOC) Virginia Department of Emergency Management / Virginia Department of Agriculture and Consumer Services (ESF-11), Coordinator, 2007-2008.

Hospital Advisory Board, Chair as Hospital Director, 2009-2014.

Virginia Veterinary Medical Association, Legislative Committee, Member, 2009-2014.

Search Committee, Emergency Planner, Office of the Assistant Vice President for Administrative Services, Member, 2009.

VMCVM / Community Animal Response Team, per MOU the Virginia Department of Agriculture and Consumer Services, Co-sheltering / State Managed Shelter Initiative, Office of the Vice President for Administrative Services, Coordinator (2007-2012), Member 2007-2014.

State Managed Shelter - Working Group, Virginia Tech Office of Emergency Management, Exercise Planning and Co-Sheltering Protocol Development, 2009-2014.

Institutional Animal Care and Use Committee, Ad-Hoc (Subject Matter Expert – Biosecurity, Avian Health), 2010-Present.

University Emergency Operation and Policy Group, Office of the President, Ad-Hoc Member (Subject Matter Expert – Animal Sheltering), Virginia Tech, 2010.

VMRCVM- Virginia Tech – State Managed Shelter / Animal Shelter – Exercise Design / Operations, 2010, Co-Coordinator, SMS exercises held August 25-27, 2010.

Conceptual Design Committee – Translational Medicine Building, VMRCVM, Member, 2010-2011.

Information Systems Review Committee, Chair, 2011.

Design Committee – Translational Medicine Building, VMRCVM, Member, 2011-2012.

Search Committee, VMRCVM Emergency Management / Continuity of Operations position, Member, 2011-2012.

Administrative Review Committee, Dr. N. White, Hospital Director, EMC, Member, 2011.

National Capitol Region Strategic Planning Committee – 2012-2018 Strategic Plan Review, Member, 2012.

Search Committee, Hospital Director, Equine Medical Center / VMRCVM, Member, 2012.

Search Committee, Faculty Position in Infectious Diseases, DPHS, Member, 2012.

CEPH Accreditation Working Group, DPHS, Member, 2012.

Search Committee, Faculty Position in Small Animal Internal Medicine – Roanoke Satellite, DSACS, Member, 2012

Search Committee, Faculty position in Small Animal Surgery – Roanoke Satellite, DSACS, Member, 2012.

Dean's Search Committee, VMRCVM, Member, 2012-13.

AVMA-COE Accreditation Working Group, VMRCVM, Member, 2013-2014.

Departmental Promotion and Tenure Committee, DPHS, Chair, 2013-2016.

DPHS Qualifying Exam Committee, Member, 2014-2018.

College Safety Committee, Member, 2014-2018

DPHS Policy and Standards (Program and Policy) Committee, Member, 2015-2018.

College Admissions Committee, Member, 2015

College Operations Board, Member, 2016-2018.

College Graduate Affairs Committee, 2016-2018.

Search Committee, Clinical Microbiologist, DBSP, Member, 2016-2017.

Search Committee, Grants and Contracts Officer, RGS, Member, 2016.

Search Committee, Public Health Program Assistant, DPHS, Member, 2016

Integrated Security - Destination Area, Steering Committee and Working Group, Member, 2016-2017.

College Representative to Delmarva Poultry Industries Summit (Re-programming for UMD and VT engagement with DPI, April 6-7, 2017, Salisbury, MD.

STUDENT ORGANIZATIONS

ACADEMIC

Wildlife, Exotic and Avian Club, VMRCVM.

Seminar: Avian restraint and diagnostic sample collection, and hematology, 1995.

Clinical Cases Rounds / Seminar: Veterinary Medical Teaching Hospital Ratite Case Submissions, 1996.

Seminar: Avian dermatologic disorders, Avian Medicine Symposium, January 20-21, 1996.

Seminar: Avian clinical techniques lab, Avian Medicine Symposium, January 20-21, 1996.

Animal Welfare Club, VMRCVM: Presentation – Development of a State Animal Response Team (SART) in Virginia for Disaster Preparedness, February 13, 2007.

Companion Animal Club (Exotic Animal Medicine), VMRCVM

Wet Lab: Avian Physical Exam, Zoo, Exotics & Wildlife Symposium (Co-sponsored by the Virginia Veterinary Medical Association), October 2, 2005,.

Student Chapter of the American Veterinary Medical Association

Seminar: General guidelines for taking of an avian history, restraint, physical examination, diagnostic sample collection, diagnostic interpretation, and therapy. SAVMA Symposium, Blacksburg, VA, March 15-18, 2000.

Wet lab: restraint, physical examination, diagnostic sample collection, and therapy. SAVMA Symposium, Blacksburg, VA, March 15-18, 2000.

Seminar: Disaster Preparedness, SCAVMA Meeting, VMRCVM, Blacksburg, Fall Semester March 5, 2012

Fourth Year Students, VMRCVM

Pre-NAVLE Review (2 hrs), Common Disorders of Birds, Fall Semester, 2006-Present.

Poultry Science Club, Virginia Tech

Seminar: Emerging poultry diseases, March 18, 1996.

Seminar: Poultry Health: Alternative Therapies and the Pressing Pharmaceutical Dilemma, September 20, 2016.

Food Animal Practitioners Club, VMRCVM

Rounds: Poult Enteritis Mortality Syndrome / Geographic Information Systems, November 28, 2000.

Rounds: Avian Influenza, 2003.

Rounds: Biosecurity Protocols in the LAH, March 26, 2007.

Rounds: Poultry Necropsy, March 20, 2010.

Rounds: Poultry Necropsy, March, 2011.

Rounds: Poultry Necropsy, March 7, 2012.

Wildlife Ward, Faculty Supervisor, serve as faculty contact for administrative purposes, provide consults on avian cases, 2006-Present.

Public Veterinary Practice Club, VMRCVM, Presentation: Development of a State Animal Response Team (SART) in Virginia for Disaster Preparedness, November 13, 2007.

Integrative Veterinary Medicine Club, VMRCVM, Presentation: Alternatives to Antibiotics, November 13, 2013.

Pre-Veterinary Club

Seminar: International Veterinary Medicine – Mongolia, March 12, 2007.

Seminar: Biosecurity and Poultry Medicine, March 24, 2008.

Seminar: Important Diseases of Poultry, Pre-Vet Club, Virginia Tech, Blacksburg, VA, February 20, 2012.

Poultry Club, College of Veterinary Medicine, North Carolina State University.

Seminar: Poultry Health: Alternative Therapies and the Pressing Pharmaceutical Dilemma, Raleigh, NC, February 25, 2016.

Forth Year Students, Lincoln Memorial University

Pre-NAVLE Review (2 hrs), Common Disorders of Birds, Spring Semester, 2018, 2019, Fall 2020.

Food Animal Club, College of Veterinary Medicine, Lincoln Memorial University

Seminar, Alternatives to Antibiotics: Rethinking Therapeutics, Ewing, VA, February 21, 2019.

OTHER

Pentecostal Campus Ministries / Pentecostal Holiness Collegiate Ministries, Faculty Advisor / Campus Chaplain, Virginia Tech, 1993-1996.

Eagle's Nest Campus Ministry, Faculty Advisor, Virginia Tech, 1996-1997.

Student Council of Christian Fellowships, Faculty Advisor, Virginia Tech, 1996.

Martin Luther King Memorial Program, Office of the Dean of Students, Virginia Tech, Program Participant, 1996.

Spirit and Fire, Faculty Advisor / Campus Chaplain, Virginia Tech, 1997-1998.

SERVICE TO PUBLIC, PROFESSIONAL AND PRIVATE ORGANIZATIONS

OFFICES

University Liaison, American Association of Avian Pathologists, 1993-1996, 1998-Present.

Chair, Northeastern Conference on Avian Diseases, 1998.

Past-Chair, Northeastern Conference on Avian Diseases, 1999.

Secretary, Northeastern Conference on Avian Diseases, 2000-2007

Co-Chair, Virginia Animal Health Emergency Preparedness Advisory Committee, 2004-2005.

Chair, Long Range Planning Committee, Mill Mountain Zoo, Roanoke, VA, 2009-2010.

Chair / Secretary, Northeastern Conference on Avian Diseases, 2007-2014.

Chair, Diseases of Public Health Significance Committee, American Association of Avian Pathologists, 2011-2016.

Co-Chair, Organizing Committee, Symposium - Emerging and Re-Emerging Zoonotic Diseases, 2016 AAAP/AVMA Annual Meeting, August 5, 2016, San Antonio, TX, 2013-2016.

COMMITTEES / BOARDS

Enteric Diseases Committee, American Association of Avian Pathologists, 1996-2006.

Respiratory Diseases Committee, American Association of Avian Pathologists, 1996-2006.

Cyberinformatics Committee, Association of Avian Veterinarians, 1997-1998.

Food Safety and Diseases of Public Health Significance Committee, American Association of Avian Pathologists, 2006-2010.

Virginia Egg Quality Assurance Board, Advisory, 1997-2004.

Virginia-Pennsylvania Turkey Days - Program Committee, 1998.

Virginia Poultry Health and Management Seminar - Program Committee, 1998-2006.

Poultry Biosecurity Committee (Virginia), 1998.

Fund for Rural America: Center for Emerging Infectious Diseases of Poultry, Planning Committee, North Carolina State University, School of Veterinary Medicine, Raleigh, NC, 1999.

Virginia Poultry Disease Task Force, Member, 1999-2018.

Mid-Atlantic Poultry Health Council, Appointed State Representative 1999-2004.

State Fair Safety Committee, 2004-2012.

Exotic Newcastle Disease Outreach and Surveillance Working Group (Virginia Department of Agriculture and Consumer Services), 2004-2005.

Disaster Animal Care Committee (VA Department of Emergency Management) - VMRCVM Representative, 2004-2006.

Shenandoah Valley Agricultural Animal Vulnerability Assessment and Preparedness Working Group, 2005.

Scientific Advisory Board, National Turkey Federation, 2007-2010.

Virginia Agroterrorism Working Group, 2007-2016.

Planning Committee, Pennsylvania Poultry Sales and Service Conference, 2009-2014.

Board of Directors, Mill Mountain Zoo, Roanoke, VA, 2009-2011.

Ad-Hoc Design Committee, Exhibit: American Enterprise – Agriculture, Smithsonian Institution, National Museum of American History, 2010.

National Institute for Occupational Safety and Health (NIOSH) / National Research Agenda (NORA) – Committee on Occupational Safety and Health in the U.S. Veterinary and Animal Care Sector, 2011-2012.

Subcommittee on Zoonoses NIH/NIOSH/NORA, 2011-2012.

Subcommittee on Respiratory Diseases, NIH/NIOSH/NORA, 2011-2012.

Diseases of Public Health Committee, American Association of Avian Pathologists, 2011-Present.

Small Flock Interest Group, American Association of Avian Pathologists, 2017-Present.

Small Flock Committee (separate from above), American Association of Avian Pathologists, 2018-Present.

SCIENTIFIC PUBLICATIONS EDITED

Proceedings of the Northeastern Conference on Avian Diseases 1998. **F. W. Pierson** Virginia Polytechnic Institute and State University.

Collected Proceedings of the Northeastern Conference on Avian Diseases 1928-2003, 2003. **F. W. Pierson** and M. E. Pierson, eds. CD version, Virginia Polytechnic Institute and State University.

Proceedings of the Northeastern Conference on Avian Diseases (Annual) 2007-2013. **F. W. Pierson** and M.E. Pierson, Virginia Polytechnic Institute and State University.

EDITORIAL BOARDS

Springer Nature / BMC Veterinary Research, Editorial Board Member, 2020-Present

MANUSCRIPT PEER-REVIEWS

American Association for the Advancement of Science: 1

American Journal of Veterinary Research: 6

Avian Diseases: 14

Avian Pathology: 4

BMC Veterinary Research: 6

International Journal of Systemic and Evolutionary Microbiology: 1

Journal of the American Veterinary Medical Association: 3

Journal of Wildlife Diseases: 1

New Zealand Veterinary Journal: 1

Northeast Agricultural Engineering Service: 1

Proceedings of the West Virginia Academy of Science: 1

Poultry Science: 2

Vaccine: 1

Veterinary Microbiology: 11

BMC Virus Research: 1

RESEARCH PROPOSAL REVIEWS

Animal Health and Disease / USDA / VMRCVM: 1

Bi-national Agricultural Research and Development Fund , US & Israel: 2
NIAID / NIH / Food Waterborne Diseases / Integrated Research Network Proposal,
Battelle Memorial Institute: 1

Maryland Agricultural Experiment Station, University of Maryland College Park: 3

Virginia Agricultural Experiment Station, USDA/Hatch, College of Agriculture and Life Sciences: 3

Swiss Federal Institute of Technology, Zurich: 1

USDA / NRI grant: 1

USAID / Middle Eastern Research Cooperative grant: 1

SUBJECT MATTER EXPERT REVIEWS / PANELS

Written Opinion: Should Pheasants (free flight/range) Be Raised in Close Proximity to Commercial Turkeys. Shadybrook Farms, Inc., 1998.

Written Opinion: Response to Inquiries Regarding Zoonotic Diseases Transmissible from Poultry. Sussex and Southampton County Boards of Commissioners, 1998.

Written Opinion: Documented Occurrences of Zoonotic Outbreaks Associated with Egg Layer Operations - supplemental information. Sussex and Southampton County Boards of Commissioners, 1998.

Written Opinion: Feasibility and Marketability of a Fiber Optic Ammonia Sensor for Use in Poultry Houses. Triad Investors Corporation, Towson, MD, 1995.

Review: U.S. Trade Descriptions for Poultry (AMS 71) Draft Document, Marketing and Regulatory Programs, Agricultural Marketing Service, Poultry Programs, USDA, 1999.

Review: Shipping Requirements for Poultry. U.S. Postal Service, 2007.

Review: Virginia Department of Agriculture and Consumer Services (VDACS) Highly Contagious Livestock or Poultry Disease Emergency Operations Plan. Provided written response to Dr. R. Wilkes on behalf of the College (Dr. Schurig) regarding the College's participation in the state emergency response plan, 2008.

Review: VDACS, Avian Influenza, Newcastle Disease, Infectious Laryngotracheitis, - Literature for Public Release, 2009.

Review: VDACS, Regulations regarding testing requirements for poultry shows and exhibitions, infectious laryngotracheitis, mycoplasmosis, 2006.

Review: National Emergency Management System (NIMS) Animal Emergency Response Job Titles/Technical Qualifications Document. The National Incident Management System (NIMS), Animal Emergency Response Working Group (AERWG), 2010.

Review: Federal Bureau of Investigation – Potential Exploitation of Avian Influenza Research, (U//FOUO), 2012.

Review: Federal Bureau of Investigation – Foreign Government Acquisition of WMD-Related Technologies, (U//FOUO), 2012.

Review: Federal Bureau of Investigation Threats Involving Synthetic Biology or Advanced Biotechnologies, (U//FOUO), 2012.

Written Opinion: Disease Risk of Backyard Poultry – Avian Influenza. Augusta Co. Board of Supervisors, at request of Ms. Anne Buzzelli, 2015.

Review: Course - "Strategic, Tactical, and Resilient Interdiction of Violent Extremism (STRIVE)" Virginia Center for Policing Innovation, Richmond, VA, 2016.

Review: Course - Animal-Plant Health Joint Criminal-Epidemiological Investigations Course, Federal Bureau of Investigation / United States Department of Agriculture, 2016.

CONSULTING

Virginia Scientific Research, Inc., Harrisonburg, VA. Paid Consultant, RE: Use of difloxacin HCL in the treatment of Escherichia coli infections in broiler chickens, 1993.

Virginia Scientific Research, Inc., Harrisonburg, VA. Paid Consultant, RE: Use of difloxacin HCL in the treatment of Pasteurella multocida infections in turkeys, 1993.

Virginia Scientific Research, Inc., Harrisonburg, VA. Paid Consultant, RE: Comparison trials - use of histostat versus coban against mixed infections with Eimeria spp. and Cochlosoma anatis in turkeys, 2002.

United States Postal Service, Unpaid Consultant, RE: Evaluation and formulation of new shipping requirements for live birds, 2007.

Ring Therapeutics, Inc., Cambridge, MA. Paid Consultant, RE: Proprietary protocol development. 2020.

Virginia Foundation for Agriculture, Innovation, and Rural Sustainability, Richmond, VA. Paid Consultant / Subject Matter Expert, RE: Subject Matter Expert, Review of proprietary claims, data, and funding request. 2021

INTERNATIONAL OUTREACH ACTIVITIES

SHORT COURSES AND TRAINING

Day of Training: Poultry Health and Management. Dr. C. Dodd, World Concern / Christian Veterinary Missions - Rwanda and Kenya, June 9, 1995, Blacksburg, VA.

Short Course: Poultry Health and Management - 27 lecture hours, 8 laboratory hours, , sponsored by Virginia Tech, the Mongolian State University of Agriculture / School of Veterinary Medicine, World Concern / Christian Veterinary Missions, and the Buheg Co., Ltd., August 2 - September 12, 1996, Ulaanbaatar, Mongolia.

Discussion Session: U.S.- Mongolian Veterinary Institute Cooperative Educational and Research Possibilities. 7th Annual Meeting of the Mongolian Veterinary Association, September 11, 1996, Ulaanbaatar, Mongolia.

Program Development: Veterinary Information Systems Access (VISA) - Internet Access Station., Collaborators: The Mongolian State University of Agriculture / School of Veterinary Medicine, Virginia Tech, Hoechst-Roussel Agrivet, World Concern / Christian Veterinary Missions, Web-access page designed by F.W. Pierson, and M.E. Pierson. Hardware donated by Hoechst-Roussel Agrivet. Formal instruction in the use of the portal and internet was delivered on-site in Ulaanbaatar, Mongolia, August 1-20, 1997.

Training Session: Poultry Disease Diagnosis, Buheg Co., Ltd., August 1-20, 1997, Ulaanbaatar, Mongolia

Short Course: Avian Medicine. Mongolia V.E.T. Net, NGO, July 28-30, 2004, Ulaanbaatar, Mongolia.

Continuing Education: Principles of Biosecurity for Agricultural Practice - Ovorhangay Aimag, Mongolian V.E.T. Net / Mercy Corps / USDA, May 16, 2006, Ulaanbaatar, Mongolia.

Continuing Education: Avian Influenza - Ovorhangay Aimag, Mongolian V.E.T. Net / Mercy Corps / USDA, May 18, 2006, Ulaanbaatar, Mongolia.
Training Program: United States Pharmacopeial Convention, Standard Operating Procedures for Antimicrobial Effectiveness and Sterility Testing of Veterinary Pharmaceuticals and Vaccines, Quality Assurance Program, Mongolian Ministry of Food and Agriculture, State Laboratory for Testing and Certification of Veterinary Drugs, Sponsored by the Swiss Agency for Development and Cooperation and Mongolia VET Net, May 15-19, 22-26, 2006, Ulaanbaatar, Mongolia.

Continuing Education: Principles of Biosecurity for Agricultural Practice – Gobialti Aimag, Mongolian V.E.T. Net / Mercy Corps / USDA, October 12, 2006, Ulaanbaatar, Mongolia.

Continuing Education: Avian Influenza – Gobialti Aimag, Mongolian V.E.T. Net / Mercy Corps / USDA, October 12, 2006, Ulaanbaatar, Mongolia.

Outcomes Assessment / Training: United States Pharmacopeial Convention, Standard Operating Procedures for Antimicrobial Effectiveness and Sterility Testing of Veterinary Pharmaceuticals and Vaccines, Quality Assurance Program, Mongolian Ministry of Food and Agriculture, State Laboratory for Testing and Certification of Veterinary Drugs, Sponsored by the Swiss Agency for Development and Cooperation and Mongolia VET Net, October 09-13, 16-20, 2006, Ulaanbaatar, Mongolia.

M.O.U., Virginia Tech, Mississippi State University, Middle Tennessee State University, Mongolia V.E.T. Net, NGO, and the Mongolian State University of Agriculture / School of Veterinary Medicine, Development Team Member / Virginia Tech Liaison, 2 year non-thesis masters degree program in veterinary science to be awarded by the Mongolian State University of Agriculture. U.S. counterpart universities assist with curriculum development and delivery, 2007-2018.

Development Team Member, Avian Influenza Preparedness and ICS training Workshop for Caribbean Nations, Inter-American Institute for Cooperation on Agriculture, 2007. Under subcontract, assisted with overall program development and delivered 1.75 hours of lecture material.

On-Line Course: Applied Veterinary Epidemiology. **F.W. Pierson** (Course leader / lecturer) and F. Elvinger, per M.O.U. with the Mongolian State University of Agriculture / School of Veterinary Medicine and Mongolia V.E.T. Net, NGO, 2009-Present.

CONSULTING / ADVISORY ACTIVITIES

World Concern / Christian Veterinary Missions, unpaid consultant (Email), poultry health, Dr. C. Dodd, Rwanda and Kenya. 1995-1997.

World Concern / Christian Veterinary Missions, unpaid consultant (Onsite / Email), poultry health, Dr. G. Mitchum, Ulaanbaatar, Mongolia. 1995-Present.

Buheg Co. Ltd. (commercial poultry and egg production), unpaid consultant (Onsite / Email), poultry health, Ulaanbaatar, Mongolia, 1996-2002.

Had Bar Turkey Breeders, unpaid consultant (Email / Telephone), hemorrhagic enteritis virus vaccination, Dr. Yishai Pantanowitz, Hod-Hasharon, Israel, 2000.

Mongolia V.E.T. Net / Swiss Development Corporation: Development of a third party verification (Quality Assurance) program for pharmaceutical and biologics produced in Mongolia. Performed needs assessment for Mongolian Veterinary Drug Testing and Certification Laboratory. Songin, Mongolia, 2004.

Mercy Corps / USDA, unpaid consultant (via Mongolia V.E.T Net, NGO), Avian influenza education and information campaign, Ulaanbaatar, Mongolia, 2006.

Pegase Medical, Inc., paid consultant / member - Scientific Advisory Board, equine and canine influenza vaccine technology / anti-inflammatory nutraceuticals, Iberville, Quebec, Canada, 2007-Present.

Mongolia V.E.T. Net, NGO, member - Board of Directors, Ulaanbaatar, Mongolia, 2007-Present.

ACADEMIC VISITORS HOSTED

Mr. D. Pruvedorj, Director of Buheg Co., Ltd., wife, and 1 veterinary student (translator). Purpose: Visit poultry companies in Shenandoah Valley; USDA, Washington DC; attended International Poultry Trade Show and Exhibition in Atlanta GA. January, 1997.

Dr. Ch. Tungalag, Head, Department of Microbiology and Pathology, The Mongolian State University of Agriculture / School of Veterinary Medicine. Purpose: learn laboratory techniques, May, 1998.

Dr. G. Javkhlan, Director, Biolimpex Co., Ltd. (Pharmaceutical Co. based in Ulaanbaatar, Mongolia), Purpose: training and instruction related to the production and use of antihelmentics, arranged working sessions with parasitology group, VMRCVM, November, 1998.

Dr. Gamal Gomaa Medani, Suez Canal University, Ismalia, Egypt, Purpose: progress review of Egyptian Channel student, Rabab Afifi, 2007.

Dr. Gabr El-Bagoury, Benha University, Benha, Egypt, Purpose: progress review of Egyptian Channel student, Zeinab Aboezz, 2016.

OTHER

International Faculty Development Program (IFDP) – Virginia Tech, Participant, traveled with cohort from Virginia Tech to The Center for European Studies and Architecture, Riva St-Vitale, Italy. Visited Politecnico de Milano, Universita della Svizzera-Italiana, Personal side-excursion - 3 days at the Food and Agriculture Organization / United Nations – Animal Production and Health Division: Crisis Management Center, Livestock Information Sector Analysis and Policy Branch, Animal Health Service- Emergency Prevention System (EMPRES) for Transboundary Animal and Plant Pests and Diseases, Rome, Italy, June 2007.

Reviewer, Promotion and Tenure, Jordan University of Science and Technology, Irbid, Jordan, 1 dossier, 2015.

ACPV Application for Emeritus Membership

Name: Dr. Morella Derosa

Address:

978 Belle Oaks blvd
Bulverde, Texas 78163
United States

Email: mderosa.d@gmail.com

Phone: (301) 283-8108

Birthplace: Caracas, Venezuela

Birth date: 5/18/1958

Citizenship/Permanent Residency: United States

Additional Information

How long have you been a member of ACPV?: 19

Resume of your experience in avian medicine:

(Recent positions, please give employer name, title, type of work and years spent)

See below.

What are you doing now?:

I will be retiring in December 31, 2022. I moved to Texas and will be working in the final construction and pending issues of my new house. After I am done with my house, I will volunteer with the Salesian missions and on my church at Spring Branch.

Other Comments:

I want to say thank you for all the support I received from the ACPV, proving training, supporting the poultry medicine business and providing opportunities to all the members. Please do not send any communication to the USDA since they will disconnect my account on Jan 01, 2023. Please use my gmail and personal address.

Thank you,

Morella DeRosa, DVM, MS, Dipl ACPV.

Morella De Rosa De Zimmerman

978 Belle Oaks Blvd
Bulverde, Texas 78163
Day Phone: (301) 2838108
Email: mderosa.d@gmail.com

Work Experience:

US Department of Agriculture

400 River Road

Riverdale, MD 20737

Employer: USDA-APHIS

06/2009- 12/2022

Hours per week: 40

Project Manager

Supervisor: Ricardo Valdez (301)8513763

Duties, Accomplishments and Related Skills:

I was responsible for the planning, prioritizing, coordinating and delivery of APHIS International Technical and Regulatory Capacity building activities (ITRCB), more specifically, I provided support for international field staff in the delivery of programs on animal health, sanitary and phytosanitary (SPS) issues and emergency response programs. I coordinated with APHIS International Services (IS) offices in their respective theater of the world to retrieve and report information, and to disseminate information and policy from headquarters to the APHIS IS offices.

I have more than sixteen years' experience coordinating and delivering capacity building activities within APHIS and with other U.S.G agencies by representing APHIS at workshops, meetings and conferences in the USA and overseas (particularly in Africa, Europe and Asia). I worked closely with the Foreign Agricultural Service (FAS), the Office of United States Agency for International Development (USAID), Department of Health and Human Services (DHHS), Center for Disease Control (CDC), Department of State (DOS) and Department of Defense (DOD). I also worked with international agencies such as the World Organization for Animal Health (OIE), The Food Agricultural Organization (FAO), The Inter-American Institute for Cooperation in Agriculture (IICA), the World Bank, the Inter-American Development Bank (IDB) and African Union Inter Bureau for Animal Resources (AU IBAR). I represented ITRCB in APHIS (Wildlife Disease Steering Committee and Employee Engagement Committee) and at national and international meetings and working groups. I have extensive knowledge of safeguarding programs, as the Program to Strengthen the Agricultural Quarantine Inspection in the Caribbean, action programs and emergency response programs including Highly Pathogenic Avian Influenza (HPAI) and regularly contributed to decision making regarding technical activities on animal and human health issues, particularly with the Global Health Security Agenda (GHSA) activities in Africa and Asia. I identified and assembled teams of specialist from APHIS and U.S Public and private sectors to provide expertise on the areas animal and plant health issues such risk management, biosecurity, laboratory assessments, surveillance and emergency response and containment among others. I planned and conducted extensive orientation of U.S experts assigned to technical cooperation programs in the U.S and overseas on USDA policies, program objectives and activities, particularly on technical and regulatory activities. In 2015, I was the Project Manager for the Africa team who received an APHIS Administrator's Award for advancing USDA's Global Food Security goals by creating and handing over West and Central Africa veterinary networks, RESOLAB and RESEPI.

With the budget program, I prepared, analyzed, and justified the ITRCB budget for the delivery of capacity building activities from the Avian Health and OTTO (animal/plant) line items International Services (IS) Deputy Administrator budget. I developed funding proposals for capacity building activities for the (DOS) and other

agencies. I managed and provided updates to the ITRCB database for programs and activities and prepared the ITRCB annual strategic and narrative capacity building reports for the APHIS senior leadership (APHIS Administrator and Deputies Administrators of IS, VS, PPQ, WS and BRS). I assisted the ITRCB Director on the design of the ITRCB annual strategic plan. Also, working with the ITRCB Director, I took the lead on finding resources to implementing monitoring and evaluating ITRCB capacity building activities for 2022 budget, with an emphasis on evaluating the outcomes, impact, and sustainability of our training programs in the U.S and overseas taking in consideration the wide variety of countries the USDA work and cultural differences.

Utilizing my 25 years working experience in U.S government, private practice and academia has allowed me to analyze and determine the type of programs and assistance that ITRCB delivers. Since 2006, I successfully secured US\$ 2.3 million in external funds to sponsor capacity building activities in the U.S and overseas and delivered over 300 APHIS capacity building activities to over 2400 government officials and private citizens from 88 countries.

In addition to the ITRCB capacity building activities, I was responsible for undeveloped and developing countries in Africa, The Middle East, and Eastern Europe regions. In this capacity, I have developed and maintained working relationships with individuals from the military regimes in Africa, from Central and West Africa, to the monarchies in the Middle East. I was responsible for the design and delivery of programs at an appropriate technological level to a diverse number of international settings that require high level of diplomacy and cultural awareness.

Other duties included, acting as ITRCB Director and International Services Visitor Center Director as requested by IS senior leadership. Since 2010, I was highly involved in APHIS cultural diversity and volunteer programs such Special Emphasis Programs, Federal Feeding Families (FFF) and Combined Federal Campaign (CFC).

United States Department of Agriculture

4700 River Road
Riverdale, MD 20737

10/2008-06/2009

Hours per week: 40

Acting Avian Influenza Project Manager

Duties, Accomplishments and Related Skills:

I was responsible for planning prioritizing coordinating and delivery of APHIS international technical, regulatory and capacity building, more specifically, I provided expertise and support to international field staff in the delivery of programs designed to prevent and manage Highly Pathogenic Avian Influenza (HPAI).

I have extensive experience coordinating services with other agencies by representing APHIS at workshops, meetings and conferences. I worked closely with the following U. S. agencies: Foreign Agricultural Service (FAS) and the Office of United States International Development (USAID), Center for Disease Control (CDC). I have also worked closely with international agencies such as the World Organization for Animal Health (OIE) and The Food Agricultural Organization (FAO). I coordinated training activities and share technical information on Avian Influenza with Non-Government organizations (NGO) such as Development Alternatives, Inc. (DAI), The Inter-American Institute for Cooperation in Agriculture (IICA). As a Project Manager, I worked with DAI to develop public-private partnerships programs in Africa and Asia, particularly in West Africa and Bangladesh. The objectives of these programs were to strength the working relation between government and private industry. I participated on HPAI international work groups and regularly contributed to decision making with regard to technical activities. I prepared and analyzed the ITRCB budget for capacity building activities in the U.S and overseas. I designed the training programs for APHIS-IS Summer interns and provided mentoring opportunities and feedback information on other internships or employment opportunity.

Utilizing my training as veterinarian and poultry disease expert allowed me to propose new cost effective programs and capacity building activities that have resulted in improvement in the containment and management of Avian Influenza in Asia and Africa.

United States Department of Agriculture

1400 Independence Avenue, Washington DC, 20003

09/2006-09/2008

Hours per week: 40

Africa Desk Officer

Duties, Accomplishments and Related Skills:

I served as the Africa Middle East and Europe Desk Officer. I provided guidance, consultation and coordination to USDA field offices in the assigned geographic region and to APHIS and FAS in Washington, DC. More specifically, I was responsible for the design and delivery of Highly Pathogenic Avian Influenza (HPAI) related projects and activities, including managing the budget. I provided technical assistance in the delivery of programs designed to combat HPAI internationally. I recruit individuals and/or teams of specialists from the U.S public and private sectors to provide appropriate expertise in partner countries in the areas of HPAI preparedness and communication, surveillance and detection, and response and containment. I was responsible for retrieving and reporting and disseminating information from the APHIS International Coordination Group (ICG) to the USDA field offices. I worked closely with specialists and coordinators from USAID, FAO, and OIE and other international agencies, nongovernmental organizations, and academia. I was involved in the logistics and coordination of the emergency response, including the deployment of emergency field staff to countries impacted by Avian Influenza. Working with FAS, I secured US\$ 1.2 million from the United States Agency for International Development (USAID) to develop and deliver capacity building activities in South East Asia (SEA). I managed capacity building activities and share technical information on Animal Health with Non- Government Organizations (NGOs) such as Development Alternatives, Inc. (DAI). As An Africa Desk Officer, I worked with DAI to develop public-private partnerships programs in Africa and Asia, particularly in West Africa in Bangladesh.

Veterinarian Private Consultant 09/1999-08/2006

Employer: Intervet/Schering Plough and La Caridad C.A

333 Boxmeer, The Netherlands, EU

I provided high level diagnostic support for veterinarians, farmers, integrated poultry companies, pharmaceutical companies and clinician veterinarians which resulted in increased productivity, and cost reduction. My training and expertise have motivated me to search for new approaches in animal health and emergency response programs. I am experienced in monitoring biosecurity in farms and other animal facilities. I assisted with budget's analysis and implemented cost effective strategies for farmers and private companies. I provided technical services and delivered capacity building activities in the areas of animal health programs in a regular basis to more than ten countries in Central America, South America, North America, and the Caribbean.

Assistant Veterinarian 12/1998-08/1999

Employer: University of California, Davis, California

2700 South Orange Street, Fresno, California 93725

I was responsible for receiving cases and gathering appropriate historical data from the submitter regarding the specific disease problems and flock management. I performed necropsies and follow up studies in the areas of bacteriology, virology, histopathology, parasitology, immunology and toxicology. I also reviewed the case findings and completed client-oriented case reports. The California Animal Health Food System (CAHFS) necropsy duty involved poultry from poultry integrations, individual companies and small farmers, pets, exotic and wild avian species.

10/1997-11/1998. Unemployed. Wait period for U.S Work Permit.

Animal Health Director 09/1996-09/1997

Employer: Proagro Av Eugenio Mendoza, Valencia, Venezuela

I was responsible for nationwide health flock monitoring from grandparents to broilers chickens. Developed a new approach to drug treatment (use of probiotics and feed enhancer products). I conducted applied research in enterovirus (mainly reovirus) and Gumboro disease. I developed biosecurity measures for poultry farms, hatcheries and processing plants. I worked closely with the Purchasing Department in the process of buying vaccines and drugs for the company-owned and contract flocks. I developed programs for disease's control, particularly coccidiosis and Mycoplasma infections. I provided field input information to the Nutrition Director in the improvement of feed conversion and cost reduction. I managed a US\$3 million budget for animal health. I supervised 19 full time employees (including four veterinarians) and two Veterinary Medicine student trainees. I coordinated capacity building activities for junior veterinarians and poultry program assistants in the company.

Avian Resident 07/1994-08/1996

Employer: University of California, Davis, California

2700 S. Orange Street, Fresno, California, 93725

Graduate School at the California Animal Health & Food Safety Laboratory System (CAHFS), School of Veterinary Medicine, University of California, Davis. This position was a two year residency program in avian diagnostics and production medicine at the Fresno Laboratory. This residency program was designed to provide training in poultry diagnostics and production medicine for veterinarians interested in avian diagnostics and clinical poultry veterinary medicine. The objectives of this residency were to 1) to provide assistance to the diagnosticians in the delivery and administration of diagnostics services to the clients of the CAHFS. 2) To provide residency training in diagnostics, epidemiology, clinical management and prevention of economically important diseases in domestic avian species. The training involved extensive poultry diagnostic casework. Casework was supplemented by weekly case conferences, seminars, lectures, and rotations through specialty laboratories including bacteriology, immunology, histopathology, virology, and toxicology. Field trips were done as requested by the clients.

Avian Health Manager 01/1992-06/1994

Employer: Proagro

Av Eugenio Mendoza, Valencia, Venezuela

I was responsible for maintaining sanitation of the poultry flocks using biosecurity measures, vaccinations plans, flock monitoring and evaluation to eradicate mayor poultry diseases such Mycoplasma gallisepticum and Salmonella enteritidis. I developed effective and cost efficient sanitation plans at the broilers and breeders farms and hatcheries. I engaged in industry driven research in broilers and breeders working in collaboration with University of Georgia. I supervised 11 full time employees (including 3 veterinarians) and two agricultural summer interns. I provided training to the company's veterinary services including field veterinarians, veterinary assistants, laboratory technicians and veterinary students.

Chief Avian Diagnostic Laboratory 12/1990-12/1991

Employer: Proagro

Av Eugenio Mendoza, Valencia, Venezuela

I was responsible for diagnosis and recommendations in poultry cases including broilers breeders and layers in the lab and at the field. I was responsible for maintaining quality control and sanitation of hatcheries (mainly bacteria/fungi control) and processing plants (bacteria, particularly Salmonella sp, Listeria sp and Campylobacter sp). I supervised one veterinarian, five laboratory technicians and one veterinary student (part time).

Veterinarian Avian Diagnostic Laboratory 04/1984/07/1988

Employer: Proagro

Av Eugenio Mendoza, Valencia, Venezuela

I was responsible for poultry necropsies, diagnostics and recommendations for poultry cases referred to the Proagro laboratory services. I worked with poultry producers and integrations. I compile and analyze poultry diagnostics and provided recommendation on best practices for biosecurity and poultry management.

EDUCATION:

University of California Davis, Davis, California, August 1996
Veterinary School- Avian Diagnostics and Production Medicine Residency

North Carolina State University Dec 1990
PH.D coursework in Veterinary Medical Science GPA: 3.66/4.00

North Carolina State University Dec 1990
Master Science Degree, Veterinary Medical Sciences minor in Poultry Science GPA:3.66/4.00

Universidad Central de Venezuela May 1983
D.V.M Degree, GPA: 3, 5/4.00

CERTIFICATIONS:

Certified Poultry Veterinarian, American College of Poultry Veterinarians Board, Jacksonville, Florida.

COMPUTER SKILLS:

PC and Apple Operating Systems, Microsoft Office, Outlook, Excel and SharePoint

LANGUAGES:

Spanish: advanced

Italian: intermediate

French: Basic

REFERENCES

Mr. Micah Rosenblum	USDA-FAS	Policy Coordination and Planning Unit Office FAS/OCBD
Email Address:	micah.rosenblum@usda.gov	
Reference Type:	Professional	
Ms Avis Massenbourg	FAS USDA	Cochran Program, Branch Chief, FAS-USDA
Email Address:	avis.watts-massenbourg@usda.gov	
Reference Type:	Professional	
Dr Aris Malo	Boehringer Ingelheim	Global Technical Senior Consultant (Avian)

Email Address: Arisave@gmail.com

Reference Type: Professional

**Dr Rich Chin DVM,
MPVM, DACPV**

California Animal Health
and Food Safety
Laboratory System,
University of California,
Davis.

Associate professor
(Retired)

Email Address: rich.chin@ucdavis.edu

Reference Type: Personal

ACPV Application for Emeritus Membership

Name: Dr. Gregorio Rosales

Address:

14835 Creek Lane
Athens, Alabama 35613
United States

Email: agregoriorosales@gmail.com

Phone: (256) 374-5460

Birthplace: Texcoco, Mexico

Birth date: 6/27/1956

Citizenship/Permanent Residency: United States

Additional Information

How long have you been a member of ACPV?: 30

Resume of your experience in avian medicine:

(Recent positions, please give employer name, title, type of work and years spent)

See below.

What are you doing now?:

I moved into full retirement.

Other Comments:

Very grateful to AAAP and all my mentors, colleagues, and friends for their support throughout my professional career.

A. Gregorio Rosales DVM, MS, Ph.D, DACPV
14835 Creek Lane
Athens, Alabama 35613
Telephone: (256) 374-5460

EDUCATION:

Ph.D. Spring 1988 - University of Georgia
M.S. Summer 1983 - University of Georgia
D.V.M. Fall 1979 - National Autonomous University of Mexico

EXPERIENCE:

Poultry Health Consultant July 2015- December 2022
Athens, Alabama.

- Aviagen North America and International Divisions
- Charoen Popkphand Foods, Bangkok, Thailand (2015-2018)
- Health monitoring and surveillance
- Biosecurity and disease prevention
- Veterinary Diagnostic Laboratory (BLS-II) design and management
- Education and training of veterinary and laboratory teams
- Presentations at various meetings in the US and abroad on current challenges and health prevention strategies

Technical Editor for aviNews America Latina March 2018- June 2021
Grupo de Comunicación Agrinews S.L., Barcelona, Spain.

- Reviewing, editing, and writing of articles on avian pathology, broiler, and broiler breeder management
- Technical Director for LPN Congress 2018, Miami, FL

Vice President of Veterinary Services Feb. 1998 – June 2015
Aviagen Incorporated (Previously Ross Breeders, Inc.), Huntsville, Alabama.

- Aviagen North America Executive and Aviagen Global Veterinary teams.
- Liaison with regulatory agencies and poultry industry organizations.
- Participated in customer visits and presentations.
- Managed budget and veterinary staff including 5 veterinarians, 2 laboratory managers and 40 laboratory technicians.
- Developed and implemented biosecurity, health monitoring and animal welfare programs for all generations of the breeding program.
- Ensured compliance with regulatory, export and ISO 9000 requirements.
- Trained veterinary technical support personnel.
- Wrote and edited company policies, sales and marketing materials, technical bulletins, and broiler breeder management guides.

- Established and supervised cooperative or contracted research projects on disease prevention and control.

Director of Veterinary Services

Oct. 1995 - Jan. 1998

Ross Breeders Incorporated, Huntsville, Alabama.

- Contributed to customer support-business development projects with sales, technical service, and marketing departments.
- Developed biosecurity, vaccination, and health monitoring programs for all levels of the breeding program and hatcheries.
- Aided production and genetics departments to meet production and quality goals.
- Assisted genetics and marketing departments in product development, evaluation, and advertising.
- Wrote and edited technical bulletins on disease diagnosis, prevention and control.
- Participated as a speaker in customer and poultry meetings in the U.S. and Latin America.

Staff Veterinarian

Sep. 1991 - Oct. 1995

Ross Breeders, Inc. - Broiler Breeders, Huntsville, Alabama.

- Provided technical veterinary assistance to parent and grandparent customers in the U.S. and Latin America through field visits and technical seminars.
- Assisted in the preparation of laboratory manuals, operational procedures, and health reports for exports.
- Provided technical assistance to parent and grandparent customers in the U.S. and Latin America.
- Assisted in the preparation and editing of technical bulletins on management and disease prevention.
- Produced articles for industry publications and participated in industry technical events in the U.S. and abroad.
- Prepared and implemented customer education programs.

Director of Technical Services

Apr. 1988 - Aug. 1991

Indian River International - Broiler Breeders, Nacogdoches, Texas.

- Managed technical service and veterinary laboratory staff including 4 technical managers and 4 technicians.
- Designed and implemented biosecurity, vaccination and health monitoring programs for pedigree, great-grandparent, and grandparent operations.
- Designed health monitoring programs for all levels of the breeding program and hatcheries.
- Provided technical support to customers in the U.S., Europe, Middle East, and Latin America.
- Produced and edited technical bulletins on breeder management and disease prevention.
- Participated in scientific and industry meetings in the U.S. and abroad.

Graduate Research Assistant Jan. 1985 - Mar. 1988
Poultry Diagnostic and Research Center, College of Veterinary Medicine, University of Georgia.

- Ph.D. dissertation: Isolation and comparative studies of pathogenicity of different strains of infectious bursal disease virus in chickens.
- Assisted and performed diagnosis of viral diseases from field specimens.
- Served as English to Spanish translator for trade and scientific publications and performed simultaneous translation during several international poultry meetings.
- Assisted in teaching animal and avian virology to veterinary and microbiology students.
- Served as a consultant on avian pathology for the American Soybean Association.

Assistant Professor Sep. 1983 - Dec. 1984
College of Veterinary Medicine, National Autonomous University of Mexico, Mexico City, Mexico.

- Taught course on avian diseases to senior veterinary and graduate students.
- Served as head of diagnostic services of the avian pathology laboratory.
- Conducted research and directed thesis projects.
- Served as a private consultant to commercial layer, broiler, and broiler breeder operations.

Graduate Research Assistant Sep. 1981 - Aug. 1983
Poultry Diagnostic and Research Center, College of Veterinary Medicine, University of Georgia.

- M.S. dissertation: Effects of avian reovirus strains associated with malabsorption syndrome on the respiratory tract of chickens.
- Assisted and performed diagnosis of viral diseases from field submissions.
- Served as English to Spanish translator for trade publications, international congresses, and proceedings.

Staff Veterinarian and Broiler Breeder Manager Sep. 1979 - Aug. 1981
Cremi-Pollo / Argus Hatchery, Mexico City and Ticumán, Morelos, Mexico.

- Managed broiler breeder farm and hatchery staff.
- Designed and implemented biosecurity and preventive programs.
- Prepared hatching egg and broiler chick projections.
- Served as liaison between breeder-hatchery and broiler departments.

PROFESSIONAL AFFILIATIONS:

- American Association of Avian Pathologists
- American Veterinary Medical Association
- American College of Poultry Veterinarians

PROFESSIONAL ACTIVITIES:

- Board of Governors of the American College of Poultry Veterinarians (2019- 2021).
- Auditing Committee of the American Association of Avian Pathologists (since 2015).
- Regulatory Advisory Panel, American Veterinary Medical Association and American Association of Poultry Pathologists (2015-2017).

- NPIP AI-Clean Compartment and Auditor Certification Workshop. USDA/VS/NPIP, US Poultry and Egg Association, and Poultry Primary Breeders (2007-2017).
- Legislative Action Committee, American Association of Avian Pathologists (2015-2017).
- General Conference Committee of the National Poultry Improvement Plan (NPIP-USDA), South Central Region (2012-2016 and 2000-2004)
- Board of Directors of the United States Animal Health Association (USAHA), South Region (2006-2015).
- Foundation Research Advisory Committee, U.S. Poultry and Egg Association (2005-2013).
- USDA-ARS-ADOL Poultry Industry Council (APIC) formerly known as Industry Liaison Committee (2004-2015)
- Poultry Health Committee, National Broiler Council (1997-2015).
- Chair, Tumor Virus Committee, American Association of Avian Pathologists (2010-2011)
- Chair, Scientific Program of the American Association of Avian Pathologists, and member of the Convention Planning and Management Committee of the American Veterinary Medical Association (2006-2009).
- Board of Directors of the Journal of Applied Poultry Research (1997-2002)
- Editorial Board of the Journal of Applied Poultry Research (1993-2002)
- Awards Committee, American Association of Avian Pathologists (1993-1999)
- President, American Association of Poultry Primary Breeding Veterinarians (1997-1998)
- Examinations Committee of the American College of Poultry Veterinarians (1994 -1997)
- Chair, Animal Welfare and Management Practices Committee, American Association of Poultry Pathologists (1995-1997)
- President of the Association of Avian Technical Service Veterinarians (1994-1995)
- International Program Committee of the Southeastern Poultry and Egg Association (1989-1991)

SPECIALTY BOARD, SCHOLARSHIPS, AWARDS AND RECOGNITION:

- Lasher-Bottorff Award, American Association of Avian Pathologists (2018)
- Lamplighter Award, US Poultry and Egg Association (2015)
- Special Service Award, American Association of Avian Pathologists (2012)
- Diplomat of the American College of Poultry Veterinarians (since 1992)
- Gamma Sigma Delta - Society of Agriculture Science, Athens, Georgia (1988)
- Phi Beta Delta - Honor Society for International Scholars, Athens, Georgia (1988)
- Xi Chapter of Phi Zeta - Honor Society of Veterinary Medicine, Athens, Georgia (1987)
- Scholarship – M.S Degree at U. of Georgia, National Council of Science and Technology (CONACYT), Mexico City, Mexico (1981-1983)
- *Valedictorian - Gabino Barreda* Award for Scholastic Achievement - College of Veterinary Medicine, National Autonomous University of Mexico, Mexico City (1980)

List of publications and presentations available upon request

ACPV Application for Emeritus Membership

Name: Dr. Cheryl Trayford (Gustafson)

Address:

4127 W 54th St
Roeland Park, Kansas 66205
United States

Email: ctrayford95@gmail.com

Phone: (816) 223-6007

Birthplace: Marshfield, WI

Birth date: 4/18/1958

Citizenship/Permanent Residency: United States

Additional Information

How long have you been a member of ACPV?: 19

Resume of your experience in avian medicine:

(Recent positions, please give employer name, title, type of work and years spent)

See below.

What are you doing now?:

Currently I reside in Kansas, enjoying the out of doors, birdwatching, and gardening. My husband and I are planning backpacking trips and a tour of the US in our recently purchased Airstream Basecamp travel trailer. I keep in contact with some of my fellow poultry colleagues and my BI colleagues. I may do some contract technical writing work as a consultant in the future.

Other Comments:

CHERYL TRAYFORD, DVM, MBA, DIPL. ACPV

4127 W 54th St, Roeland Park, KS, USA 66205
+1 (816)-223-6007 mobile, ctrayford95@gmail.com

VETERINARIAN and BUSINESS PROFESSIONAL

Product Development and Technical Market Support (Pharmacovigilance) veterinarian with broad experience across species (Poultry, Cattle, and Companion Animals), geographies (US, Asia, Australia, Latin America) and business functions (Pivotal Field Effectiveness (GCP), Market Support Studies, Technical Training/Support) and Compliance (Pharmacovigilance, Promotion Literature and Advertising Review)). Demonstrated ability to interface effectively with diverse groups. Extensive experience in clinical data management, technical writing and technical writing and technical transfer (Training) to both internal and external customers. Advanced education in Poultry health with extensive poultry experience in field support. Strong business aptitude driving sustainable company growth in a team-based structure across department and boundaries.

AREAS OF EXPERTISE

- ◆ GCP/GLP studies
- ◆ Marketing field studies
- ◆ Technical and marketing writing
- ◆ Food safety and public health issues
- ◆ Pharmacovigilance assessments
- ◆ Project management
- ◆ New product launches
- ◆ Implementation of process improvements (e.g., eDC)
- ◆ Collaboration with various professional groups
- ◆ Diagnostic testing and lab development
- ◆ Customer service management
- ◆ International marketing and technical support
- ◆ Sustainability - the triple bottom line -
(People, Planet and Profit)

PROFESSIONAL VETERINARY EXPERIENCE

Boehringer-Ingelheim, St. Joseph, MO

2016 to 2022

Senior Scientist, R&D Pharmaceutical Clinical Development

Initiates and coordinates strategic scientific experiments that contribute to core research goals. Responsible for design and execution of pivotal GCP protocols for food animal and companion animal pharmaceutical regulatory submissions to FDA (CVM). Accountable for all aspects of project implementation including, protocol development, budget review and maintenance, site monitoring and final study report writing.

- Develop protocols and coordinate GCP pivotal studies for multi-location food-animal sites for effectiveness and field safety studies.
- Write and coordinate the writing of final study reports for multi-location food-animal and companion animal effectiveness studies for regulatory submissions to FDA (CVM).
- Manage and monitor GLP studies performed at contract research organization (CRO) sites.
- Liaise with CROs developing environmental assessments for regulatory submissions to FDA (CVM).
- Participate with Regulatory Affairs in pre-submission meetings with FDA.
- Present technical reports and updates of projects to scientists and stakeholders monthly.
- Interact with International project leaders and core teams as projects necessitate.
- Arrange and lead webinars and working sessions to support project needs and team requirements.
- Develop tools using Share Rooms for on boarding of new R&D employees on a global basis.

Parnell, Overland Park, KS

2013 to 2015

Senior Scientific Affairs Associate

Responsible for conduct and multi-site monitoring of pivotal GCP protocols for companion animal pharmaceutical products (FDA (CVM)). Contributed to the development of protocols, technical reports, and technical sections for regulatory submissions. Maintained pharmacovigilance and technical service activities in Australia and USA for cattle

and companion animal products and programs.

- Coordinated and completed GCP studies for multi-location veterinary practice-based effectiveness and field safety studies.
- Experience in the conduct of studies utilizing electronic data capture and electronic submissions (e-Submitter)
- Managed and lead clinical research associates for studies conducted in the USA and Australia.
- Selected and trained primary investigators and study participants at USA sites on study protocol, use of e-DC and GCP. Managed site budgets, adverse reactions, and clinical supplies.
- Managed clinical study sites and data collected through Dairy Comp 305 from dairy farms throughout USA.
- Implemented new pharmacovigilance database for reporting adverse drug events, wrote SOPs and managed the reporting process in all relevant jurisdictions worldwide.
- Researched literature and communicated findings (oral and written) to external and internal customers.
- Approved marketing materials, and product label updates to FDA working closing with QA and other departments.

Abaxis Veterinary Reference Laboratory, Olathe, KS

2011 to 2012

Customer Service Manager

Developed and implemented the customer service department for startup reference laboratory servicing local and national veterinary clinics in coordination with parent company. Managed daily activities of customer service representatives

- Formed customer service team for startup company.
- Solved customer inquiries and concerns associated with orders, test results, lab services, and courier pickups.
- Managed call center representatives that handled inbound and outbound customer calls.
- Implemented resolutions associated with exception handling of samples in conjunction with lab operations.
- Coordinated custom training for customer service representatives.
- Assisted in development of customer service policies and procedures.
- Implemented new process improvements to increase efficiencies and maximize profits.
- Performed dual role as manager of customer service and lab accessioning departments.

Pfizer Animal Health (previously Fort Dodge AH), Overland Park, KS

2005 to 2010

Technical Consultant-Poultry

Provided veterinary technical customer support and diagnostics for the US poultry sales and technical assistance to Global Poultry Business Unit.

- Coordinated Phase IV studies for new and existing products domestically and internationally.
- Managed customer concerns and product defects for biologicals. Certified in PV Works.
- Implemented a new process for reporting adverse events and product defects within poultry department.
- Directed development of 4 training videos for vaccination techniques to be used domestically and globally.
- Managed creation and editing of 6 training manuals for Pfizer vaccines with disease information.
- Coordinated with marketing on launch of new products at trade shows, training, and product literature.
- Set up and maintained an e-Room, an electronic site to allow regions to access marketing and technical continuing education information.

CSC (Computer Sciences Corporation) Training Center of Excellence,

Hampton, VA & Raleigh, NC

2004 to 2005

Senior Technical Advisor-Poultry

Collaborated with USDA veterinarians and epidemiologists at the USDA Regional Epidemiology Office on the Low Path Avian Influenza project by focusing on the Live Bird Market System and developing solutions for AI control.

- Created presentations for Animal Health Technician epidemiology, disease and surveillance training sessions which included more than 100 participants.
- Contributed as a trainer at the 2005 USDA Animal Health Technician training session and formulated a continuing education plan for the next three years.
- Edited and updated Avian Influenza public brochures and poultry related videos.

Embrex, Inc., Research Triangle Park, North Carolina

2000 to 2004

Global Technical Services Manager-Poultry

Directed, conducted, and collaborated on poultry disease field trials. Including analyzing data, writing reports and presenting results to various audiences. at local seminars, regional association meetings and major industry conferences. Managed customer interactions and provided field diagnostic expertise.

- Coordinated and conducted technical training. Supported sales of biological and *in ovo* equipment products in cooperation with sales and marketing departments.
- Wrote articles for peer-reviewed professional journals, trade journals and company communication.

CEVA SANTÉ ANIMALÉ, Kuala Lumpur, MALAYSIA

1997 to 2000

Regional Technical Manager-Asia Pacific-Poultry

Conducted field trials, laboratory trials, training, and seminars internally and with veterinarians and producers throughout Asia-Pacific region. Processed and handled product concerns.

- Participated in intensive training to determine marketing strategy for the poultry and some swine products.
- Conducted veterinary field training sessions as a customer service with extensive farm visits.
- Coordinated technical and product matters regionally through management of country technical and marketing managers.
- Researched and wrote technical articles for trade journals and internal technical information. Coordinated the publication of quarterly company magazine containing product, technical and customer information.
- Presented at various professional conferences in Asia and in the USA. Presented extensively at company functions and local seminars. Interacted and cooperated with professionals at all levels, including University researchers, field veterinarians and producers.

CAHFS (California Animal Health and Food Safety Lab), Turlock, California

1995 to 1997

Diagnostician/Pathologist-Poultry

Provided full diagnostic laboratory support to poultry producers in central California, including meat and multiplier turkeys, table egg layers and broiler chickens. Co-leader of 6 lab technicians.

- Obtained complete flock histories, performed necropsies, collected appropriate tissue specimens for bacteriology, serology, histopathology, virology, and toxicology, analyzed and interpreted test results, read histopathology slides and formulated diagnoses.
- Coordinated lab diagnostic efforts with laboratory technicians in each discipline. Maintained quality control and quality assurance as per national laboratory and university standards with random monitoring of results. Consulted, reported results, and wrote final reports for producers and veterinarians.
- Collaborated with industry personnel, veterinarians, and others on quality control measures, NPIP compliance, disease surveillance and conducted epidemiological research to identify contributing factors in disease outbreaks.

University of California – Davis (Environmental Toxicology Department), Davis, CA

1992 to 1994

Postgraduate Researcher – Conducted pharmacokinetic studies in GLP lab in collaboration with Pharmacia & Upjohn, Inc. Assured studies were in compliance with bio-security, animal care, and welfare policies.

Zamora Hills Ranch & University of California, Davis, Davis, CA

1989 to 1992

Livestock and Lab Animal Technician – Large animal and lab animal veterinary technician experience. Horse boarding stables caretaker.

PROFESSIONAL NON-VETERINARY EXPERIENCE

USFS (US Forest Service, Lassen NF), Hat Creek, CA

1989

Wildlife Biologist – Conducted wildlife biology projects. Collected data on the nesting habits of the spotted owl in relation to timber plans. Assisted in forest fires as needed.

USFS (US Forest Service, Mendocino NF), Stonyford, CA

1985 to 1986

Forestry Technician – Responsible for the preparation of timber sale units which included measurement of trees, marking of sale area, and calculation of volume for sale contracts.

- USFS** (US Forest Service, Shasta-Trinity NF), Hayfork, CA **1984 to 1985**
Forester – Conducted plantation surveys, marked plantations for pre-commercial thinning, inspected planting contracts, and summarized survival exam data. Prepared areas for timber sales. Acted as foreman on timber cruising crew. Conducted stream surveys and survival exams for silviculture department. Fought forest fires as needed.
- NPS** (National Park Service), Yosemite, CA **1983 to 1984**
Forestry Technician – Organized and conducted surveys of hazardous trees along the Merced River. Participated as firefighter in controlled burns.
- PEACE CORPS**, Dominica and St. Vincent, West Indies **1980 to 1981**
Forest Manager, Peace Corp Volunteer – Was responsible for forest management and public relations working directly for the Forestry Department on two islands. Reorganized the Conservation Association, set up public nature field trips, took part in radio broadcasts, and organized forestry lectures for the forest guards. Mapped existing pine plantations, monitored the reforestation of watershed areas, and worked on a parrot project on St. Vincent.
- DNR** (Department of Natural Resources), Cloquet, Minnesota **1980**
Forestry Aid – Conducted private pine plantation survey. Analyzed data and made recommendations for stand improvement to the private landowner. Collected data from spruce plots for a spruce budworm study and mapped the overall budworm damage after aerially surveying the district.

EDUCATION & CREDENTIALS

- **MBA** with concentration in Environmental and Social Sustainability; CTU, Colorado Tech Univ.
- **DVM, Veterinary Medicine** with an emphasis in Food Animal Medicine; School of Veterinary Medicine, University of California, Davis; Davis, CA
- **DVM License and Accreditation in California, North Carolina, and Kansas**
- **Board Certified in Poultry Medicine**, Diplomate of American College of Poultry Veterinarians
- **Specialty Credential in Avian Diagnostic Medicine**, Univ. of CA Residency, California Animal Health, and Food Safety Laboratory System (CAHFS), Turlock, CA
- **BS with honors, Biology and Animal Science**, California State University, Chico
- **BS, Forest Resources**, University of Minnesota, College of Forestry; St. Paul, MN

MEMBERSHIPS & AFFILIATIONS

- American Association of Avian Pathologists (AAAP)
 - ♦ Past chair of biologic committee; past member of awards committee
- American College of Poultry Veterinarians (ACPV)
 - ♦ Past chair of nominating committee
- American Veterinary Medical Association (AVMA)
- United States Animal Health Association (USAHA)
- American Association of Bovine Practitioners (AABP)

PEER-REVIEWED JOURNAL PUBLICATIONS

Wiltbank, M.C., Baez, G.M., Cochrane, F., Barletta, R.V., Trayford, C.R., Joseph, R.T. Effect of a second treatment with prostaglandin F_{2α} during Ovsynch protocol on luteolysis and pregnancy in dairy cows. *Journal of Dairy Science* Dec. 98(12):8644-54, 2015.

Gustafson, C.R., Cooper, G.L., Charlton, B.R., Bickford, A.A. and Nordhausen, R. Postural and Neurological Deficits in Broiler Chicks after Cervical Vaccination with Live Vaccine. *Journal of Veterinary Diagnostic Investigation* 15:361-364, 2003.

Gustafson, C.R., Cooper, G.L. Charlton, B.R. and Bickford, A. A. *Pasteurella multocida* Infection Involving Cranial Air Spaces in Chickens. *Avian Diseases* 42:413-417, 1998.

Gustafson, C.R. Bickford, A.A, Cooper, G.L. and Charlton, B.R. Sticktight Fleas Associated with Fowl Pox in a Backyard Chicken Flock in California. *Avian Diseases* 41:1006-1009, 1997.

Craigmill, A.L., Brown, S.A., Wetzlich, S.E. Gustafson, C.R. and Arndt, T.S. Pharmacokinetics of Ceftiofur and Metabolites after Single Intravenous and Intramuscular Administration and Multiple Intramuscular Administration of Ceftiofur Sodium to Sheep. *Journal of Veterinary Pharmacology and Therapeutics* Apr. 20(2):139-144, 1997.

Courtin, F., Craigmill, A.L., Brown, S.A., Wetzlich, S.E., Gustafson, C.R. and Arndt, T.S. Pharmacokinetics of Ceftiofur and Metabolites after Single Intravenous and Intramuscular Administration and Multiple Intramuscular Administration of Ceftiofur Sodium to Dairy Goats. *Journal of Veterinary Pharmacology and Therapeutics* Oct 20 (5) 368-373, 1997.

REFERENCES AVAILABLE UPON REQUEST