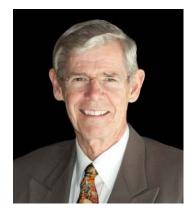
CURRICULUM VITAE E. PAUL J. GIBBS



Professor Emeritus

Formerly Director of the University of Florida's International Center Associate Dean for Students and Instruction Professor of Virology

College of Veterinary Medicine, Box 110880, University of Florida, Gainesville, Florida 32611, USA. Telephone 352-294-4182; Mobile 1-352-339-3650; Home 1-352-376-314 e-mail: <u>pgibbs@ufl.edu</u> Website: <u>http://vetmed.ufl.edu/about-the-college/faculty-directory/paul-gibbs/</u>

BIRTHPLACE:	Wales, United Kingdom	
CITIZENSHIP:	United States of America and United Kingdom	
FAMILY:	Married Christine F. Mayo 1968 (retired High School teacher)	
	Two daughters, Katherine (Physician) and Samantha (Veterinarian)	

PROFESSIONAL FOCUS

One World: One Health with a focus on the control and prevention of emerging and foreign animal diseases of viral etiology, including those of zoonotic importance, through research, policy development, and emergency response training.

QUALIFICATIONS

- University of Bristol, School of Veterinary Science, Bachelor of Veterinary Science, (BVSc.) 1967. (equivalent to DVM)
- Membership Royal College of Veterinary Surgeons, (M.R.C.V.S.) 1967
- University of Bristol, School of Veterinary Science, Doctor of Philosophy (Ph.D.) 1970. (Thesis: Virus infections of the skin of the bovine teat.)
- Fellowship Royal College of Veterinary Surgeons, (F.R.C.V.S.) 1976 (by examination). (Thesis: Foot-and-Mouth Disease in British Deer.)

RECENT AWARDS AND RECOGNITIONS (2005-2013)

- 1. Pioneer in Virology award of the American Association of Veterinary Laboratory Diagnosticians
- 2. Recognition of Outstanding Service US Animal Health Association
- 3. Distinguished Service Award, Florida Veterinary Medical Association
- 4. Special Recognition by State of Florida for Contributions to Disease Control in Florida
- 5. Carl Norden Distinguished Teaching Award
- 6. Wooldridge Medal, British Veterinary Association
- 7. Chair of the Foreign and Emerging Diseases Committee of the US Animal Health Association (2008-2013)
- 8. Advisor to CEZAAD (Kansas State University <u>http://sites.google.com/site/ceezad/home</u>) and FAZD (Texas A&M University <u>http://fazd.tamu.edu/</u>)
- 9. Chair of Advisory Boards of ICONZ (University of Edinburgh <u>http://www.iconzafrica.org/</u>) and ADVANZ (University of Copenhagen <u>http://www.advanz.org/</u>)
- 10. Fellowship of Society of Tropical Veterinary Medicine for Meritorious Contributions

11. University of Florida International Educator 2007 in College of Veterinary Medicine

12. Distinguished Alumni Lecturer, University of Florida, 2006

EMPLOYMENT

2010 to April 2012

Associate Dean for Students and Instruction, College of Veterinary Medicine

1981 to April 2012

Professor of Virology, Department of Infectious Diseases and Pathology, College of Veterinary Medicine. **1994 to 1999**

Director of International Center for the University of Florida (Chief International Officer of the University) (Other than the footnote¹, activities associated with this appointment are not reported in detail)

1985-1994

Chief of Microbiology and Parasitology, Veterinary Medical Teaching Hospital, College of Veterinary Medicine **1979 to 1981**

Associate Professor of Virology, Department of Preventive Medicine, College of Veterinary Medicine, University of Florida.

1970 to 1979

Pirbright Institute, UK. Initially as Veterinary Research Officer with promotion in 1972 to Senior Veterinary Research Officer, and in 1977 to Principal Veterinary Research Officer.

1967 to 1970

University of Bristol, UK. Registered as a Ph.D. student with lecture duties in veterinary medicine, meat inspection and public health.

OTHER EMPLOYMENT

1967

Temporary appointment with Ministry of Agriculture, during Foot-and-Mouth epidemic in U.K.

¹ In October of 1994, I was appointed Director of the University of Florida's Office of International Studies and Programs. Up to this time, my career had been focused on the international control and eradication of emerging viral diseases of veterinary/medical importance characterized as having epidemic potential. My appointment resulted from a close but informal working relationship that I had developed with the Provost when exploring ways in which the different colleges of the university could be encouraged to strengthen their international activities. As the Chief International Officer for the University, it was my responsibility to see that the Office provided leadership and vision in helping the Colleges at the University of Florida achieve UF's international goals. The directorship was a presidential appointment reporting directly to the Provost. It involved working with the Vice-Presidents, Deans, Directors, faculty, staff, and students of the university to promote internal and external liaison relating to international issues. As the first step in a strategic plan developed in conjunction with an external advisory board, I moved the Office to a new facility and renamed it the International Center. When I was director, the University of Florida had approximately 44,000 students and a faculty strength of over 4,000. Each year, UFIC sent approximately 1000 students overseas, received 2000, and provided visa and support services for approximately 1000 visiting post docs and faculty from overseas. The Center was also involved in technical and diplomatic issues in many parts of the world, for example, the Peace Process in the Middle East. In 1998, in response to a request from me and supported by the external advisory board, the President's Office agreed to seek a full time Dean for International Programs. I decided not to pursue this opportunity, but agreed to stay as Director until July 1st 1999. Ambassador Dennis Jett was subsequently appointed Dean. The International Center has its own website http://www.ufic.ufl.edu/ which provides greater details of the services and responsibilities of the center which I established. Activities associated with this appointment are not recorded in this document. During this time I traveled widely and was involved in many diplomatic and technical missions on behalf of the University.

1975

Visiting Senior Research Fellow to Department of Veterinary Pathology, University of Ibadan, Nigeria. Seconded from Institute or Animal Health by Ministry of Overseas Development (UK) to University of Ibadan, Nigeria, to develop virus diagnostic facilities in S. Nigeria. Contract cancelled by British Government for political reasons

JOINT APPOINTMENTS

2010 to date

Joint Appointment with Department of Environmental and Global Health, College of Public Health and Health Professions, University of Florida

2007 to date

Joint Appointment with Department of Epidemiology and Biostatistics, College of Public Health and Health Professions, University of Florida

1979 to date

Joint Appointment with Department of Molecular Genetics and Microbiology, College of Medicine, University of Florida

TEACHING RESPONSIBILITY (before retirement)

College of Veterinary Medicine and College of Public Health and Health Professions

- 1. "Veterinary Infectious Disease" VEM 5141 (Sophomores). Co-Course co-coordinator
- 2. "Veterinary Epidemiology" VEM 5503 (Juniors) Course Coordinator
- 3. "Exotic and Emerging Diseases", Elective VEM 5571 (Juniors) Course Coordinator
- 4. "Emerging and Foreign Animal Diseases" Web Based VEM 5510 (Juniors) Course Coordinator
- 5. "Career Opportunities" VEM 5001 (Freshmen) Course Coordinator
- 6. "Surveillance and Control of Transboundary Diseases Affecting International Trade" P01613 <u>CTVM MSc</u> in International Animal Health
- 7. Coordinator with Centers for Disease Control for Student Involvement in biennial "CDC Day

EDUCATIONAL MEDIA and COURSE DEVELOPMENT

- Multi Agency Response Exercises. In 2008, I wrote and facilitated a 3 day multiagency exercise on responding to an introduction of Rift Valley Fever into Florida. The exercise was held at the state emergency operations center in Tallahassee and involved over 100 professionals from several state and national organizations (CDC, USDA, FBI etc) <u>www.flsart.org/RVF</u>. In May 2010, 2 similar exercises with different scenarios were held in Puerto Rico and St Croix. In January 2012, I was involved in a team that wrote and presented a similar exercise on Screwworm in Florida.
- 2. In 2007, I provided the organizational leadership that established a joint degree program (Doctor of Veterinary Medicine/Masters of Public Health) between the College of Veterinary Medicine and the College of Public Health and Health Professions. Between 5 and 10 students enroll in this program each year in the freshman year.
- 3. In response to the current concerns over bioterrorism, I am involved in training the State of Florida Agricultural Response Team to recognize foreign animal diseases. The course can be found at http://www.flsart.org/training/index.html This course has embedded video and can be taken for Continuing Education credit for veterinarians practicing in Florida
- 4. In 2006, to help students in the Middle and High Schools of Florida understand the importance of Emerging Diseases, I began meeting each year with Science teachers from around the State and have provided them with learning materials for use in the class rooms. This is now integrated into a UF campus program supported by the Howard Hughes Medical Institute

- 5. In 2005, I was invited by the Center for Tropical Medicine at the University of Edinburgh to join their steering committee to develop an MSc course in International Animal Health through distance learning. The program focuses on veterinarians in the developing world <u>CTVM MSc in International Animal Health</u>. I also teach a module in this course as described above.
- 6. To complement my teaching to veterinary students at St Georges University in Grenada, the National Board of Veterinary Medical Examiners (Philadelphia) invited me in 2002 to become an item writer for the qualifying examination. In 2001-2002 with the assistance of colleagues, principally Dr Sergio Vega, I organized a 30 lecture distance education course to assist 53 foreign trained veterinarians take the NAVLE examination as part of the ECFVG of the AVMA certification prior to Board Certification. This course was taught in conjunction with Nova South Eastern University in Fort Lauderdale. It was adapted to the web but has since been taken down to be updated.

WEB BASED DISTANCE LEARNING COURSES

- 1. "Foreign Animal Disease Recognition Course" for Continuing Education Credit for Veterinarians http://www.flsart.org/training/index.html 2007 Open access
- 2. "Surveillance and Control of Transboundary Diseases Affecting International Trade" <u>CTVM MSc in</u> <u>International Animal Health</u> University of Edinburgh 2007 Password protected
- 3. Foreign Animal Disease Recognition PowerPoint Presentation and Workbook for non-veterinarians. http://www.flsart.org/library/index.htm 2006 Open access
- 4. Advisor in development of Large Animal First Aid PowerPoint Presentation 2007 (SART) Open access
- 5. Advisor in development of Small Animal First Aid PowerPoint Presentation 2008 (SART) Open access (Both #4 and # 5 available at <u>http://www.flsart.org/library/index.htm</u>)

DESCRIPTION OF RESEARCH AT THE UNIVERSITY OF FLORIDA

My Research Funding (from 1979 to 2008) is presented as two tables as an addendum to the curriculum vitae

The focus of my field and laboratory research has always been on the epidemiology and control of emerging viral disease and the relationship of emerging diseases to human and wildlife populations. My recent research has been the development and/or evaluation of recombinant vaccines for animals. Each of the programs listed below illustrates the application of modern techniques in molecular biology and computer technology to the study of emerging diseases. Equally, they illustrate the importance of the team approach to modern science. The following briefly summarizes the objectives and achievements of my research with the most recent activities listed first. I was involved in the initiation of the research on canine influenza and West Nile vaccination with Drs Cynda Crawford and Dr Maureen Long, respectively, as team leaders. For the other projects listed, I was the team leader.

Discovery of canine influenza in dogs: An acute respiratory disease in greyhounds of unknown etiology has caused sporadic track closings in Florida and other states since 1992. However, since 1999 these epidemics have occurred more regularly, and many dogs have died of hemorrhagic pneumonia. In response to this situation, a research team was established in 2003 to respond quickly to any recurrence of the disease and maximize opportunities to establish the etiology. In January 2004, respiratory disease hit the Jacksonville track forcing it to close. In one of the affected kennels, 8 of 26 dogs died. In collaboration with Cornell University and the Centers for Disease Control in Atlanta, equine influenza was identified as the causal virus. Since that time, the disease has spread widely in both greyhounds and pet dogs in the USA. The virus has apparently mutated to efficiently transmit between dogs. Currently, the disease has been reported in more than 25 states and the District of Columbia. The discovery was published in Science in 2005 and provides an interesting parallel to the emergence of H5N1 avian influenza as a human pathogen.

Evaluation for Intervet of a recombinant vaccine to protect horses from infection with West Nile virus: The vaccine is based on a Yellow fever virus "backbone" expressing the envelope genes of West Nile virus. The evaluation involved the vaccination/challenge of large groups of horses (>100) by a route of inoculation that consistently produces clinical disease. This intensive work was conducted in a BSL2+ facility over 2 years. The vaccine was granted a USDA license in October 2006 and is now available for veterinary use in horses. There is a similar vaccine in human clinical trials; thus this work is attracting comparative interest.

Evaluation of the safety of needlefree devices for mass vaccination: This work was conducted in conjunction with CDC and WHO and focused on evaluating the risk of such "guns" in accidentally transmitting viral diseases such as AIDS and Hepatitis B. A pig model and a calf model were developed whereby albumin contamination was assayed by ELISA as a surrogate for viral load. The study was required to support the use of such guns for the global eradication of measles and to vaccinate large populations in the event of biological terrorism.

Recombinant herpes vectored vaccines for horses: In light of the equine experience and facilities of the University of Florida, Hoechst Roussel/Intervet funded a 5 year program under my direction as principal investigator from 1996-2000. The project addressed the development of novel influenza and herpes vaccines. Although the laboratory science worked well, the product did not protect horses from viral challenge.

Pseudorabies and recombinant poxvirus vectors: The research team that I developed to work on African swine fever in the early 1980's discovered incidentally that pseudorabies virus (PRV) infections were common in feral swine in Florida (approximately 35% of the 500,000 population in Florida has antibody). In 1989, a \$200 million, 10-year national program to eradicate PRV from the domestic swine began, but it was realized that infection in the feral swine represented the Achilles Heel of the program. A research program examining the epidemiology of pseudorabies in feral swine and the feasibility of using a recombinant vaccine to control/eradicate pseudorabies in feral swine by oral vaccination using "vaccine bait" was funded by the USDA. Dr Richard Moyer was a Co-PI on this work. A patent was filed in 1989 and issued in 1997 for swinepox virus as a vaccine vector. The original concept of using this vector in swine extended to other diseases beyond pseudorabies. The possible use of the vector as a delivery system for growth hormones in domestic swine and immunoneutering of feral swine was even considered at one time because of the host species restriction of this virus. Swinepox/pseudorabies recombinant viruses have been shown to induce an antibody response to pseudorabies virus in swine and to provide clinical protection to challenge. In addition to USDA, SmithKline Beecham (SKB) Animal Health supported this work for several years. Difficulty in growing high titer virus and our failure to achieve protection through oral vaccination precluded further research upon the merger of SKB with Pfizer. The company returned the technology to the University of Florida.

While this vaccine research was progressing, collaboration to study the epidemiology of pseudorabies in wild swine was established with colleagues across the USA and in Europe. Progress was initially slow but a discovery from this work has had fundamental significance to the eradication program for the eradication of disease in the domestic population of the USA. It was shown that whereas pseudorabies is transmitted by aerosol in domestic populations, in wild swine it appears to be almost exclusively transmitted by the venereal route. This supposed change in tropism is a fascinating evolutionary trait in the virus. Most importantly, it provides a simple approach (segregation and a good fence) for maintaining the domestic population free of pseudorabies. With this knowledge the program was continued and in 2006 pseudorabies was eradicated from the domestic swine herd in the USA.

Eastern equine encephalitis: In the mid-eighties, I established a team studying EEE. We investigated the development of geographic information systems (GIS) (leading to the use of remote sensing by satellite to identify breeding sites of the mosquito vector), rapid diagnostic tests for diagnosing disease in man and animals, and the development of improved vaccines (having recently recognized that early vaccination can lead to immune tolerance). An epidemic in 1991, in both horses and man, highlighted the importance of this virus in the eastern states. Epidemiologists from the National Animal Health Monitoring System of the USDA in Fort

Collins, Colorado decided to extend our early work on GIS. The program has examined the geographical distribution of disease throughout the state and generated computer models attempting to predict epidemics.

Bluetongue: This program, which began as long ago as 1979, covered 12 countries in the Caribbean and Central America and was directed to promoting the international exchange of ruminant germ plasm (including zoological species). The study was completed in June 1992. It centered around the concept that the "global" epidemiology of bluetongue virus can be regarded as a series of separate ecosystems, with the Caribbean region being one and North America another. The leadership for this program originated in Florida. As the Central American component enlarged, the leadership was transferred in 1986 to the University of Wisconsin and the Arthropod-borne Animal Diseases Laboratory, USDA, in Laramie. This program was recognized, at the 2nd International Symposium on African horse sickness and Bluetongue and b) the development of the concept of regulatory medicine recognizing ecosystems as the basis for animal movement policy. My involvement with bluetongue also involved a similar study in India funded by the Office of International Cooperation and Development of USDA and USDA colleagues in Laramie. The sudden jump of bluetongue into Northern Europe in 2006 has drawn renewed attention to this work in the Caribbean and Central America.

African swine fever in the Caribbean Basin: In 1978, African swine fever was diagnosed in the Dominican Republic and Haiti. To assess the risk that the virus could enter Florida and thence cause devastation in the national swine herd, an extensive research and surveillance program was initiated under my leadership. The program was focused on feral swine in Florida and the possibility that once the virus was introduced it would become endemic. This would be most likely if the indigenous soft ticks could become virus reservoirs. The research illustrated the clinical susceptibility of feral pigs to ASF virus. Soft ticks present in Florida and the Caribbean were shown to be potential biological vectors of the virus. When an eradication program, based on total depopulation of swine from the Dominican Republic and Haiti began, UF was invited to monitor whether soft ticks had become infected. Fortunately, they had not become infected and the depopulation program was successful. African swine fever has not re-appeared in the Caribbean.

PREVIOUS RESEARCH IN THE UNITED KINGDOM

Pirbright Institute, England 1970-1979

- 1. The epidemiology and pathogenesis of bluetongue and related viruses.
- 2. The susceptibility of British deer to foot-and-mouth disease virus.
- 3. Studies on rinderpest and related viruses in W. Africa.
- 4. Studies on sheep and goat pox.
- 5. Miscellaneous projects as detailed in publications.

University of Bristol 1967-1970

- 1. Emerging virus infections of the bovine teat skin with particular reference to the diagnosis and epidemiology of disease.
- 2. Miscellaneous projects as detailed in publications.

PATENTS ISSUED

- 1. U.S. Patent Swine pox virus a vaccine vector. Richard Moyer, Eladio Vinuela and Paul Gibbs. <u>Patent</u> <u>US6217882</u> Use of recombinant swine poxvirus as a live vaccine vector Google Patents
- 2. U.S. Patent Canine influenza virus. Cynda Crawford, Mark Mellencamp, Daniel Goovaerts, Melissa Lum, Nallakannu Lakshmanan, Jacqueline Katz, Ruben Donis, Edward Dubovi, Paul Gibbs, Alexander Klimov, William Castleman, and Nancy Cox. <u>Patent US7959929</u> <u>Materials and methods for respiratory disease control in canines Google Patents</u>

PATENT LICENSES

- 1. Merck holds a license on the Swine pox technology UF based on the UF Swine Pox patent held by Moyer, Vinuela and Gibbs
- 2. Merck holds a license on the Canine influenza technology and now markets a canine influenza vaccine in the USA

EDITORIAL RESPONSIBILITIES

- 1. Editorial board: "Vaccine", Elsevier, Amsterdam (1981-2009)
- 2. Editorial board: "Journal of Veterinary Medical Education (2007 -2010)
- 3. Occasional reviewer for articles submitted to Emerging Diseases, American Journal Veterinary Research, Journal American Veterinary Medical Association, Virus Research, Archives of Virology, Journal of Zoo and Wildlife Medicine, Journal of Veterinary Diagnostic Investigation, Epidemiology and Infection, Bulletin WHO, Veterinary Record, Journal Wildlife Diseases, Wildlife Research, Transboundary Diseases
- 4. Editorial Task Force for joint issue of British Medical Journal and Veterinary Record on "Animal and human health: strengthening the link" published Nov 26, 2005.
- 5. Editorial Board for Web based "One Health" newsletter published by Department of Health, State of Florida
- 6. Co-Editor for Special Edition of Animal Health Research Reviews on Emerging Influenza Viruses
- 7. Co-Editor for "The Global Eradication of Rinderpest" FAO/OIE In Progress

SCIENTIFIC ADVISOR 1990-2013

- 1. Office of International Cooperation and Development of USDA, India Project on "Studies on epidemiology and immunobiology of bluetongue virus"; Haryana Agricultural University, Hisar, India. (1990)
- 2. Office of International Cooperation and Development of USDA, "Development of research programs on swine diseases in Indonesia". INI ANSREDEF, Bogor. (1994)
- 3. State Agricultural Response Team Advisory Board (2005 -)
- 4. Expert Panel for the Chief Scientific Officer of Department of the Environment, Food and Rural Affairs (Defra) in the UK (2007-8)
- Chair of Advisory Boards of ICONZ (University of Edinburgh <u>http://www.iconzafrica.org/</u>) and ADVANZ (University of Copenhagen <u>ADVANZ – removing the N from NZD | Advocacy for</u> <u>Neglected Zoonotic Diseases</u>).
- 7. Advisor to CEZAAD (Kansas State University CEEZAD
- 8. Advisor to FAZD (Texas A&M University <u>http://fazd.tamu.edu/</u>

CONSULTANCIES 2013

1 Booz, Allen, Hamilton research proposal review for Defense Threat Reduction Agency of Department of Defense

AD HOC CONSULTANCIES and WORKING GROUPS: 1980-2013

- 1. USDA -APHIS Washington Importation of cattle from Brazil and exportation of germ plasm to Europe.
- 2. International Livestock Center for Africa (ILCA) Ibadan, Nigeria Control of disease in ruminants in West Africa.
- 3. Inter-American Institute for Co-operation on Agriculture (IICA), International problems with bluetongue. Barbados.

- 4. Inter-American Institute for Co-operation on Agriculture (IICA), International problems with African swine fever. Haiti.
- 5. US AID Assessment of Viral Diseases of Veterinary Importance in Cameroon, West Africa.
- 6. FAO UN, Advisor to Chief, Animal Health Division on future development of WHO/FAO Comparative Virology Program.
- 7. Inter-American Institute for Co-operation on Agriculture (IICA), Reproduction in Large Animals. Guyana, S. America.
- 8. Governments of Ecuador & Chile on Viral Diseases of Livestock.
- 9. Inter-American Institute for Co-operation on Agriculture (IICA), Epidemiology of Virus Diseases in the Caribbean Region. Guyana, S. America.
- 10. Agriculture Canada, Foreign and High Priority Diseases
- 11. FAO UN, Advisor on Establishing International Animal Disease Diagnostic Centre in Africa
- 12. USDA, APHIS, Encephalitis in horses, vaccines and EEC import regulations
- 13. Pasteur Merieux Institute, Lyon, France; member of Scientific Advisory Committee.
- 14. USDA, APHIS, The disease threat of feral swine to national eradication programs.
- 15. USDA, APHIS, Foreign Animal Disease Test Exercise (African horse sickness), Florida and Washington.
- 16. SmithKline Beecham Animal Health, The Future of Biotechnology in Animal Health, Philadelphia, USA.
- 17. USDA-APHIS Feral Swine Advisory Group
- 18. APHIS USDA Expert Panel on Possible Importation of Cattle from Mexico originating from Australia
- 19. Fulton Medical Jet gun technology
- 20. Am-O-Jet Jet gun technology
- 21. Consultant to AVIS consortium in UK on development of audiovisual web based tutorials on emerging and foreign animal diseases
- 22. Hoechst, Germany, on vaccine development for horses (1995-2000)
- 23. FAO, IAEA Vienna. Distance learning technology and emerging diseases with particular emphasis on the global eradication of rinderpest (2004)
- 24. Item Writer National Board of Veterinary Medical Examiners (2004/5)
- 25. Visiting Professor (Virology) St George's University, Grenada (2003-2006)
- 26. NAREEB Advisory Board to Secretary of Agriculture, USDA (2005)
- 27. Visit to Cuba on behalf of USDA re Bluetongue Import/Export negotiation (2005)
- 28. Department of Agriculture and Consumer Affairs, State of Florida, Response Team Training (2001-)
- 29. Department of Health, State of Florida, on Avian Influenza Preparedness (2005-)
- 30. Steering Committee MSc Course, International Animal Health, University of Edinburgh, UK (2005-)
- 31. Foresight Exercise, American Association Veterinary Medical Colleges (2006)
- 32. Catastrophic Diseases of Wildlife "Think Tank", USDA and Colorado State University (2007)
- 33. Bluetongue Virus serotype 8: What is the risk to the USA? USDA Denver (2008)
- 34. Costa Rican Government country visit on surveillance for West Nile encephalitis (2009)
- 35. Prionics, Switzerland, on bovine spongiform encephalopathy and diagnostic technology (1998 to 2010)
- 36. Intervet, The Netherlands, on vaccine development for horses and regulatory policy (2003-2012)
- 37. Expert panel on exotic diseases advising the Chief Scientist of the Department of the Environment, Food, and Rural Affairs (DEFRA), in the UK (2010-)

RECENT GRANT and RESEARCH PROGRAM REVIEW BOARDS

- 1. USDA CSREES Panel member for National Research Initiative (2006)
- 2. Program Review on Statutory and Exotic Animal Diseases Department of Environment, Food, and Rural Affairs, UK (2007 and 2008)
- 3. Program review of Neglected Zoonoses for European Union (2008)
- 4. Ad hoc review
 - a. United States Department of Agriculture, National Research Initiative,
 - b. NIH Review Section "Research on Hantavirus and Other Emerging Viral Threats"

- c. National Science Foundation,
- d. Office of International Cooperation and Development,
- e. BARD USA/Israel
- f. New York Academy of Sciences
- g. Wellcome Trust (2005)
- h. National Academy Sciences (2005)
- i. Department of Environment, Food, and Rural Affairs, UK (2005-2010)
- j. Scottish Executive (2005)
- 5. External reviewer of Statutory and Exotic Disease Research, UK Government
- 6. External Reviewer of Neglected Zoonoses and Bluetongue Programs of European Union
- 7. European Union Review of H1N1 influenza proposals (2009)
- 8. European Union Review of Vector Borne disease proposals (2010)
- 9. National Review of Agricultural Research Service Animal Health Program of US Department of Agriculture (2012)
- 10. Horse Race Betting Levy Board (2013)

INTERNATIONAL, NATIONAL AND STATE COMMITTEES 1981-2013

- 1. American Committee on Arthropod-Borne Viruses Sub committee on Veterinary Arbovirology (1981-1987) (Chairman 1982-83).
- 2. US Animal Health Association Committees on Foreign Animal Diseases (Chair 2008 to date), Infectious Diseases of Horses, Biologics, Bluetongue and Pseudorabies.
- 3. Regional Epidemiologist (S.E. States) Thoroughbred Breeders Association (to ~1995)
- 4. State of Florida Pseudorabies Advisory Committee (to ~ 1995)
- 5. International Society of Vaccines- Executive Committee (to ~ 2000)
- 6. Feral Swine Advisory Committee to APHIS, USDA (to 2000)
- 7. Society Tropical Veterinary Medicine; President, (1999-to 2001)
- 8. State Agricultural Response Team Advisory Committee (2004- to date)
- 9. Animal Industry Technical Council to Department of Agriculture and Consumer Affairs (Florida) (2003- to date)
- 10. Public Health and International Committee, American Association Veterinary Medical Colleges, (2006-2010)
- 11. Public Health Committee of the Florida Veterinary Medical Association (2013-)

UNIVERSITY COMMITTEES: 1981-2012 (Excludes ex-officio role related to responsibilities as Director of the International Center and Associate Dean of the College of Veterinary Medicine)

- 1. Genetic Engineering (to 1983)
- 2. University Senate (to 1984, 1993- 1997, and 2008- 2011)
- 3. Patent Committee (Biomedical) (1985 -1993); Biomedical and Biotechnology (1993-1996)
- 4. Council on International Studies and Programs (1987-1992)
- 5. Advisory Committee to Biotechnology Institute and Progress Center (1991-1992)
- 6. Advisory Committee to IFAS and College of Natural Resources International Programs (1994-1996)
- 7. Search Committee for Director, Emerging Pathogens Institute (2006)
- 8. Search Committee for Dean, College of Public Health and Health Related Professions (2009)
- 9. Search Committee for Virologist, College of Veterinary Medicine (2012)

COLLEGE OF VETERINARY MEDICINE COMMITTEES: 1981-2012

- 1. Research Committee, Chair (to 1983)
- 2. Long Range Planning and Capital Improvement (1981-1983)
- 3. International Programs Chair (1981-88)

- 4. Infectious Diseases Security Building Design & Construction Committee Chair (to 1983)
- Search Committees for a) Immunologist (Chairman), b) Assistant Dean for Research, c) Head of Department of Infectious Diseases, d) Molecular Virologist (Chairman), e) Immunologist, f) Molecular Biologists, g) Extension Veterinarian (Chairman) h) Anesthesiologist, j) Epidemiologist i) Veterinary Microbiologist; j) Virologist.
- 6. Faculty Promotion & Tenure Committee (1984-1987; Chair 2006-7)
- 7. Admissions Committee for Veterinary Students (1985-1987; 1990-92; 2004-2006)
- 8. Graduate Advisory Committee (1985-87)
- 9. Safety Committee (1986-1987; 1993-95)
- 10. Curriculum Committee (1987-8;2003-2006 Chair 2008-2010)
- 11. Pew Educational Program, Committee on Strategic Planning (1988-1990)
- 12. Facilities Planning (1993)
- 13. Student Awards (1999-2002)
- 14. Sustained Performance (2000- Chair)
- 15. Information Technology Advisory Committee (2002-2007 Chair)
- 16. Library Committee (2002---2003)
- 17. Faculty Council (2002–2005)
- 18. Curriculum Committee (2008 -2010 Chair)
- 19. Student Faculty Advisory Committee (2008-2010)
- 20. Faculty Advisor, Public Health and Service Club, College of Veterinary Medicine (2008-2012)

AD HOC COMMITTEES at University of Florida (Beyond CVM): 1984-2012

- 1. Food for Africa Center for African Studies, UF
- 2. Liaison Review Center for Latin American Studies, UF
- 3. Grant Review Division of Sponsored Research, UF
- 4. Animal Contact Medical Monitoring, UF

OTHER APPOINTMENTS: 1979-

- 1. Center for Tropical Animal Health (1980-1991) College of Veterinary Medicine
- 2. Center for African Studies (1979 -) University of Florida
- 3. Emerging Pathogens Institute (2009-) University of Florida

EXTERNAL EXAMINER

- 1. External Reviewer for Professorial Appointments in Sudan and Israel (several), and US (predominantly University of Kentucky)
- 2. External Examiner for Ph.D. Candidate, Australian National Animal Health Laboratory
- 3. External Examiner for PhD Candidate, University of the West Indies
- 4. External Examiner for PhD Candidate, University of Pretoria, South Africa

PROFESSIONAL SOCIETIES: 2013

American Veterinary Medical Association, British Veterinary Association, Florida Veterinary Medical Association. U.S. Animal Health Association. Honor Society of Phi Zeta. Society of Tropical Veterinary Medicine, Royal College of Veterinary Surgeons, Wildlife Disease Association

CONFERENCE ORGANIZATION 1999 - 2013

1. Society of Tropical Veterinary Medicine. When President elect, President, and past President, I assisted the Executive Committee in developing a series of 3 Biennial conferences from 1999 to 2003 addressing themes

associated with Emerging Diseases. The proceedings of these conferences were published by the NY Academy of Sciences.

- 2. In 2005 and 2007, I assisted the Department of Health, State of Florida, in organizing conferences on Zoonoses.
- 3. In January 2006 I assisted the University of Minnesota with an Avian Influenza Course as part of their Public Health Winter Institute in Florida
- 4. Assisted students in organizing World Rabies Day 2007
- 5. Co-Conference Organizer One Health Symposium Joint meeting of the American Society Tropical Medicine and Hygiene and Society of Tropical Veterinary Medicine, Washington DC November 2009
- 6. Scientific Committee for Neglected Influenza Conferences, Amelia Island, February, 2010, Dublin 2013

FIELD and LABORATORY EXPERIENCE of EMERGING and FOREIGN ANIMAL DISEASES

Foot-and-mouth disease; bluetongue; epizootic hemorrhagic disease of deer; rinderpest; peste des petits ruminants, cowpox, sheep and goat pox; lumpyskin disease; equine encephalitides (eastern, Venezuelan, West Nile); African swine fever; swine vesicular disease; pseudorabies; bovine herpes mammillitis, canine, equine, and avian influenza and miscellaneous viral diseases.

FIELD EXPERIENCE OF DISEASE CONTROL IN DEVELOPING COUNTRIES

- 1. Cyprus: 1971-1977. Approximately 1 year, over 10 visits, studying bluetongue, foot-and-mouth disease vaccination, and other viral diseases.
- 2. Nigeria and Ghana: 1975-1981. Approximately 6 months, over 5 visits, studying bluetongue, foot-and-mouth disease, peste-des-petits ruminants, and other diseases.
- 3. Haiti, Barbados, Puerto Rico, American Virgin Islands, St. Lucia, Trinidad and Tobago, Jamaica, Costa Rica, Guyana: 1980-1991. Approximately 1 year, over 20 visits, studying bluetongue and African swine fever.
- 4. Cameroon: 1984. Two week visit studying African swine fever, peste-des-petits ruminants, and rinderpest.
- 5. Ethiopia, Kenya, Zimbabwe, Cameroon, Chad, Senegal, Mali: 1989. Eight weeks for FAO assessment of diagnostic laboratory capabilities and transfer of biotechnology.
- 6. India: 1993. Short visit to review bluetongue situation.
- 7. Indonesia and Singapore: 1994. 4 week review of diagnostic laboratories and swine diseases for USDA
- 8. Hong Kong and Vietnam: 2005. 3 week visit to assess diagnostics and epidemiology of highly pathogenic avian influenza H5N1.

SHORT INTERNATIONAL STUDY VISITS

- 1. USA: 1974. Four months at the Vector-Borne Viral Diseases Division of the Centers for Disease Control at Fort Collins, Colorado. During this time, I helped investigate a) the epidemiology of Venezuelan equine encephalitis virus on the Mexican border and b) the ecology of Western equine encephalitis in Colorado.
- 2. Australia: 1983. Four week visit to laboratories in Perth, Melbourne, Canberra, Brisbane and Townsville.
- 3. Republic of South Africa: 1984. One week visit to Onderstepoort Veterinary Research Institute.
- 4. Scotland, UK: 1985. One week visit to laboratories in Edinburgh.
- 5. Israel: 1988. Two week teaching at Veterinary School and State Veterinary Services
- 6. Canada: 1988. Two week teaching exotic diseases with Agriculture Canada
- 7. Australia: 1989. One week visit to CSIRO laboratories in Brisbane and Geelong.
- 8. Greece: 1992. Two week NATO Advance Studies Institute on New-Generation Vaccines.
- 9 Japan: 1994. One week visit to Biotechnology Laboratories in Tokyo and Okayama
- 10 Germany 1996. One week visit to State Epidemiology laboratories
- 11 UK 2001. Several visits studying the Foot-and-Mouth epidemic.
- 12 Kenya 2005 Two week visit studying epidemiology of disease at the wildlife/domestic animal interface

13 Australia. 2007 Three week visit to laboratories and Veterinary Schools in connection with equine influenza epidemic

GRADUATE STUDENTS AND POST-DOCS

Major supervisor:

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Post Docs:

Wayne Kramer (USA); Ken Holscher (USA); Rick Wilkerson (USA); Andy Beck (USA) Sam Telfer (USA); Skip Choate (USA); Claudette Mo (Brazil); Pete Turner (UK); Martin van der Leek (S. Africa). Stasia Bembenek (USA); Dana McDaniel (USA)

Assistant Research Scientists Carlos Romero, Mark Abdy, Mark Sweat, Tara Anderson

PUBLICATIONS:

Book, Author

- 1. Murphy, F.A., **Gibbs**, E.P.J., Horzinek, M., and Studdert, M.J. "**Veterinary Virology.**" 3rd Edition, 1999. Academic Press, Orlando.
- 2. Second edition 1993, Fenner, F., Gibbs, E.P.J., Murphy, F.A. Rott, R., Studdert, M.J. and White. D.O.
- 3. First edition 1987; Fenner, Bachmann, Gibbs, Murphy, Studdert and White.
- 4. First edition, Spanish translation, 1992

Books, Editor

- 1. "Virus diseases of food animals. A world geography of epidemiology and control"; **Gibbs**, E.P.J. 2 volumes, 786 pages. Academic Press, London 1981. (Translated into Spanish, 1987)
- 2. "Tropical veterinary medicine: current issues and perspectives". Eds, Williams, J.C., Kocan, K.M., and **Gibbs**, E.P.J. Vol. 653. Annals of the New York Academy of Sciences, New York, 1992.
- 3. "Tropical veterinary medicine: disease control and prevention in the context of the New World Order". Eds House, J.A., Kocan, K.M., and **Gibbs**, E.P.J. Vol 916. Annals of the New York Academy of Sciences, New York, 2001
- 4. "The domestic animal/wildlife interface: issues for disease control, conservation, sustainable food production and emerging diseases". Eds **Gibbs**, E.P.J. and Bokma, B. H. Vol 969. Annals of the New York Academy of Sciences, New York, 2003
- 5. "Animal Influenzas". Guest Editor with Mo Saif. Special issue of Animal Health Research Reviews. Cambridge Press Vol 11 Special Issue 1, Pages 1-96. 2010

6. "The Global Eradication of Rinderpest" Eds, Taylor, W.P., Pastoret, P.P. and **Gibbs E.P.J.** Commissioned by FAO and OIE In preparation

Books/Manuals, Contributor of Chapter

- 1. [**Gibbs**, E.P.J.] (1976). Methods for the detection of the viruses of certain disease in animals and animal products lumpyskin disease. pp. 38-49. Series -Information and Agriculture No. 16 Commission of the European Economic Communities, Brussels.
- Appel, M.H.G., Gibbs, E.P.J., Martin, S.J., Ter Meulen, V.T., Rima, B.K., Stephenson, J.R. and Taylor, W.P. (1981). Morbillivirus diseases of animals and man. Comparative Diagnosis of Virus Infections. IV Vertebrate Animal and Related Viruses. Ed E. Kurstak and C. Kurstak. Academic Press IV Part B pp. 235-297.
- 3. **Gibbs**, E.P.J. (1981). Virus infections of the skin of the bovine teat. Current Veterinary Therapy in Food Animal Practice, pp. 631-636. Ed. J. Howard. W.B. Saunders Co.
- 4. **Gibbs**, E.P.J. (1981). Sheep and goat pox. Current Veterinary Therapy in Food Animal Practice, pp. 636-637. Ed. J. Howard. W.B. Saunders Co.
- 5. **Gibbs**, E.P.J. (1981). Differential diagnosis of virus infection of the skin. Current Veterinary Therapy in Food Animal Practice; pp. 1161-1166. Ed. J. Howard. W.B. Saunders Co.
- 6. **Gibbs**, E.P.J. (1981). Organizations, development aid, and animal disease. In "Virus diseases of food animals -a world geography"; pp. 31-42. Ed. E.P.J. **Gibbs**, Academic Press.
- 7. **Gibbs**, E.P.J. (1981). Virus Diseases of horses. In "Virus diseases of food animals a world geography"; pp. 217-230. Ed. E.P.J. **Gibbs**, Academic Press.
- 8. **Gibbs**, E.P.J. (1981). Persistent virus infections: their relevance to the international movement of livestock and germ plasm. Adv. Vet. Sci. Comp. Med. 25, 71-100.
- 9. **Gibbs**, E.P.J. (1984). Virus diseases of the skin of the bovine teat and udder. Veterinary Clinics of North America Large Animal Practice. W.B. Saunders, Philadelphia. 6-1, 187-202.
- 10. **Gibbs**, E.P.J. (1986). Differential diagnosis of virus infections of the ruminant skin. 2nd Edition. Current Veterinary Therapy: Food Animal Practice, pp. 927-931.
- 11. **Gibbs**, E.P.J. (1986). Pseudocowpox. 2nd Edition. Current Veterinary Therapy: Food Animal Practice. pp. 478-479.
- 12. **Gibbs**, E.P.J. (1986). Cowpox and bovine vaccinia mammillitis. 2nd Edition. Current Veterinary Therapy: Food Animal Practice. pp. 476-478.
- 13. **Gibbs**, E.P.J. (1986). Sheep and goat pox. 2nd Edition. Current Veterinary Therapy: Food Animal Practice. pp. 514-515
- 14. **Gibbs,** E.P.J. (1986) Chapters in Merck Veterinary Manual 6th Edition on: Bluetongue, Swinepox Cowpox, Sheep and Goat Pox, Pseudocowpox, Lumpyskin Disease
- 15. **Gibbs**, E.P.J. (1988). Bluetongue in "Viral & Bacterial Diseases of Sheep". Assoc. French Speaking Universities. Vol II pp 38-50.
- 16. **Gibbs**, E.P.J. and Greiner E.C. (1989). Bluetongue and epizootic hemorrhagic disease in "Epidemiology of Arthropod-Borne Viral Diseases. Ed. T.P. Monath CRC Press, Boca Raton, Florida. Vol II pp 39-70.
- 17. **Gibbs**, E.P.J. Chapters in Merck Veterinary Manual 7th Edition (1991) on: Bluetongue, Swinepox, Cowpox, Sheep and Goat Pox, Pseudocowpox, Lumpyskin Disease
- 18. **Gibbs**, E.P.J. (1992). Pseudocowpox, Cowpox and bovine vaccinia mammillitis, Sheep and goat pox. 3rd Edition. Current Veterinary Therapy: Food Animal Practice.
- 19. Gibbs, E.P.J. (1992). Cowpox in "Diagnostic Veterinary Virology", Eds A.E. Castro & W.P. Heuschele, Williams & Wilkins, Baltimore. pp. 97-99.
- 20. Tanya, V.N. and **Gibbs**, E.P.J. (1990). Bluetongue in "Diseases of Sheep", Eds W.B. Martin and I.D. Aitken, Blackwell Scientific Publications, Oxford. pp 348-351.
- 21. Shearer, J.K., Tuekam, T. and **Gibbs**, E.P.J. (1992). Skin infections of the bovine teat and udder and their differential diagnosis in "Bovine Medicine". Ed A.H. Andrews, Blackwell Scientific pp 321-328
- Gibbs, E.P.J. (1991). Recombinant vectored viral vaccines in "Veterinary Annual 31". Eds C.S.G. Grunsell & M.E. Raw, Blackwell Scientific Publications, Oxford. pp. 20-31.

- 23. **Gibbs**, E.P.J. (1992). Conventional and novel vaccines for the control of virus diseases of sheep in "Progress in Vaccinology". Ed R. Pandey, Springer Verlag pp. 182-199.
- 24. **Gibbs**, E.P.J. and Tsai, T.F. (1993). Eastern equine encephalitis. CRC Handbook on Zoonoses. CRC, Boca Raton. pp. 11-24.
- 25. **Gibbs**, E.P.J. (1993). Recombinant vaccines and oral vaccination of wildlife. in "New generation vaccines; the role of basic immunology. Eds. Gregoriadis, G., Allison, A.C., and Poste, G. Plenum Press, New York, pp 139-148.
- 26. Nettleton, P. and **Gibbs**, E.P.J. (1998) Sheep vaccines in "Veterinary Vaccines" Eds. Pastoret, P.P., Blancou, J., Vannier, P., and Verschueren, C. Elsevier. pp 357-366
- 27. **Gibbs**, E.P.J. (1998) Chapters in Merck Veterinary Manual 8th Edition on:, Swinepox, Cowpox, Sheep and Goat Pox, Pseudocowpox, Lumpyskin Disease. pp 620-625
- 28 **Gibbs**, E.P.J. (2001) African Swine Fever. "Encyclopedia of Arthropod-transmitted Infections to Man and Domesticated Animals. CABI London. 7-13.
- 29 Shearer, J.K., Townsend, J., and Gibbs, E.P.J. (2003). Skin infections of the bovine teat and udder and their differential diagnosis in "Bovine Medicine". 2nd Edition. Ed A.H. Andrews, Blackwell Scientific.Ch 27 pp 363-372.
- 30 Gibbs, E.P.J. (2005) Chapters in Merck Veterinary Manual 9th Edition on:, Swinepox, Cowpox, Sheep and Goat Pox, Pseudocowpox, Lumpyskin Disease (also supplied color photographs for web based manual). pp 693-698
- 31 Gibbs, E.PJ. (2005) Bovine herpes virus 2 infections. Infectious Diseases of Livestock with Special Reference to South Africa. Eds J A W Coetzer and R C Tustin, Oxford University Press. Vol 2 pp 887-894
- 32 **Gibbs,** E.PJ. (2005) Equine encephalitides caused by Alphaviruses. Infectious Diseases of Livestock with Special Reference to South Africa. Eds J A W Coetzer and R C Tustin, Oxford University Press Vol 2 pp 1014-1022
- 33 Gibbs, E. P. J. and Long, M. (2007) Equine Alphaviruses. In Infectious Diseases of Horses. Eds Sellon, D. and Long, M. Elsevier, Chapter 20 pages 191-197.
- 34 Gibbs, E. P. J. (2007) Pox virus diseases in Merck Pet Animal Handbook Ch 35 pp503-504
- 35 Long, M.T. and Gibbs, E.P.J. (2008) Western equine encephalomyelitis; Eastern equine encephalomyelitis; Venezuelan equine encephalomyelitis; Arboviral encephalitis; equine viral myeloencephalitis, equine encephalitis; equine sleeping sickness. In Large Animal Internal Medicine. Ed. Smith B. Elsevier, Part 5 pages 985-995
- 36 Gibbs, E. P. J. (2010) Pox virus diseases in Merck Pet Animal Handbook. In Press
- 37 Kahn L.H., Kaplan, B., Monath T.P., Bokma, R.H., **Gibbs, E.P.J.** and Aguirre, A.A. (2011) One Health, One Medicine in Conservation Medicine Oxford University Press. In Press
- 38 **Gibbs**, E. P.J. (2011) Foot-and-mouth disease in wildlife. Infectious Diseases of Wild Mammals and Birds in Europe. Eds Gavier-Widen D, Duff P., and Meredith A. Wiley Blackwell In Press
- 39 **Gibbs**, E. P.J. (2011) Rift Valley fever in wildlife. Infectious Diseases of Wild Mammals and Birds in Europe. Eds Gavier-Widen D, Duff P., and Meredith A. Wiley Blackwell In Press

Journal Publications (see also link through <u>www.vetmed.ufl.edu/about-the-college/faculty-directory/paul-gibbs/</u>)

- 1. **Gibbs**, E.P.J., Johnson, R.H. and Voyle, C.A. (1970). The differential diagnosis of virus infections of the bovine teat skin by electron microscopy. J. Comp. Path., 80, 455-463.
- 2. **Gibbs**, E.P.J., Johnson, R.H. and Osborne, A.D. (1970). The differential diagnosis of viral skin infections of the bovine teat. Vet. Rec. 87, 602-609.
- 3. **Gibbs**, E.P.J., Voyle, C.A. and Madely, C.R. (1971). An examination of certain features of the fine structure of bovine herpes mammillitis virus by negative staining. Res. Vet. Sci., 12, 515-516.
- 4. **Gibbs**, E.P.J. and Collings, D.F. (1972). Observations of bovine herpes mammillitis (BHM) virus infections of heavily pregnant heifers and young calves. Vet. Rec., 90, 66-68.

- 5. **Gibbs**, E.P.J., Johnson, R.H. and Osborne, A.D. (1972). Field observations on the epidemiology of bovine herpes mammillitis. Vet. Rec., 91, 395-401.
- 6. **Gibbs**, E.P.J., Johnson, R.H. and Osborne, A.D. (1973). Experimental studies of the epidemiology of bovine herpes mammillitis. Res. Vet. Sci., 14, 139-144.
- 7. **Gibbs**, E.P.J., Johnson, R.H. and Gatehouse, A.G. (1973). Experimental studies of the epidemiology of bovine herpes mammillitis. Res. Vet. Sci., 14, 145-147.
- 8. **Gibbs**, E.P.J., Roberts, M.C. and Morris, J.H. (1972). Equine coital exanthema in the U.K. Equine Vet. J., 4, 74-80.
- 9. **Gibbs**, E.P.J., Johnson, R.H. and Collings, D.F. (1973). Cowpox in a dairy herd in the United Kingdom. Vet. Rec., 92, 56-64.
- 10. Gibbs, E.P.J. and Osborne, A.D. (1974). An epidemiological study of pseudocowpox. Br. Vet. J., 130, 150-159.
- 11. Collings, D.F., **Gibbs**, E.P.J. and Stafford, L.P. (1972). Concurrent respiratory and genital disease associated with infectious bovine rhinotracheitis/infectious pustular vulvo-vaginitis (IBR/IPV). Vet. Rec., 91, 214-219.
- 12. Rweyemamu, M.M., Johnson, R.H. and **Gibbs**, E.P.J. (1972). Studies on cell cultures persistently infected with bovine herpes mammillitis virus. The possible role of deionized water in inducing a carrier state. Br. Vet. J., 128, 611-618.
- 13. Boorman, J. and **Gibbs**, E.P.J. (1973). Multiplication of epizootic haemorrhagic disease of deer virus in Culicoides. Arch. ges.Virusforschung, 41, 257-266.
- 14. Forman, A.J., **Gibbs**, E.P.J. (1974). Foot and mouth disease in British deer- Clinical disease. J. Comp. Path., 84, 215-220.
- 15. Forman, A.J., **Gibbs**, E.P.J., Baber, D.J., Herniman, K.A.J. and Barnett, I.T.R. (1974). Foot and mouth disease in British deer -Viraemia, pharyngeal virus and serology. J. Comp. Path., 84, 221-229.
- 16. Parker, J., Herniman, K.A.J., **Gibbs**, E.P.J. and Sellers, R.F. (1975). An experimental inactivated bluetongue vaccine. Vet. Rec., 96, 284-287.
- 17. Gibbs, E.P.J., Smale, C.J. and Lawman, M.J.P. (1975). Warts in sheep. J. Comp. Path., 85, 327-334.
- 18. **Gibbs**, E.P.J., Pitzolis, G. and Lawman, M.J.P. (1975). The use of cortico- steroids to stimulate the excretion of infectious bovine rhinotracheitis virus from cattle in Cyprus that had recovered from respiratory disease and ataxia. Vet. Rec., 96, 464-466.
- 19. Gibbs, E.P.J., Herniman, K.A.J. and Lawman, M.J.P. (1975). Foot and mouth disease in British deer (Sika and Muntjac). Clinical Disease. Recovery of virus and serological response. J. Comp. Path., 85, 361-366.
- 20. Gibbs, E.P.J., Herniman, K.A.J., Lawman, M.J.P. and Sellers, R.F. (1975). Foot and mouth disease in British deer. Transmission of virus to cattle, sheep and deer. Vet. Rec., 96, 558-563
- 21. Gibbs, E.P.J., McDiarmid, A. and Rose, J.J. (1975). The management of deer for experimental purposes. Vet. Rec., 96, 503-506.
- 22. Gibbs, E.P.J. (1976). Equine viral encephalitis. Eq. Vet. J., 8, 66-71.
- Hayes, R.O., Francy, D.B., Lazuick, J.S., Smith, C.C. and Gibbs, E.P.J. (1977). Cliff swallowbug (<u>Oeciacus</u> vicarius Horvath) role in the natural cycle of Western encephalitis-like alphavirus. J. Med. Entomology, 14, 257-262.
- 24. Gibbs, E.P.J. and Rweyemamu, M.M. (1977). Bovine herpesvirus, 1. Vet. Bulletin, 47, 411-425.
- 25. Gibbs, E.P.J. and Rweyemamu, M.M. (1977). Bovine herpesvirus, 2 and 3. Vet. Bulletin, 47, 317-343.
- 26. Gibbs, E.P.J. and Lawman, M.J.P. (1977). Infection of British deer and farm animals with epizootic haemorrhagic disease of deer virus. J. Comp. Path., 87, 335-343.
- 27. Lawman, M.J.P., **Gibbs**, E.P.J. and Davies, J.A. (1977). Studies with epizootic haemorrhagic disease of deer virus in tissue culture and laboratory animals. J. Comp. Path., 87, 345-352.
- 28. Nawathe, D.R., **Gibbs**, E.P.J., Asagba, M.O. and Lawman, M.J.P. (1978). Lumpyskin diseases in Nigeria. Trop. Anim. Hlth. Prod., 10, 49-54.
- 29. Gibbs, E.P.J., Taylor W.P. and Lawman, M.J.P. (1977). The isolation of adenoviruses from goats affected with peste des petits ruminants in Nigeria. Res. Vet. Sci., 23, 331-335.
- 30. Lawman, M.J.P., Evans, D., **Gibbs**, E.P.J., McDiarmid, A. and Rowe, L. (1978). A preliminary survey of British deer for antibody to some viral diseases of farm animals. Br. Vet. J., 134, 85-91.

- 31. Gibbs, E.P.J. (1978). Collection of specimens for the laboratory diagnosis of viral diseases. Vet. Rec., In Practice, 1, 21-29.
- 32. Obi, T.U. and **Gibbs**, E.P.J. (1978). Confirmation of orf in sheep and goats in Nigeria. Trop. Anim. Hlth. Prod., 10, 233-235.
- 33. Gibbs, E.P.J., Taylor, W.P., Lawman, M.J.P. and Bryant, J. (1979). Classification of peste des petits ruminants virus as the fourth member of the morbillivirus group. Intervirology, 11, 268-274.
- 34. Gibbs, E.P.J., Lawman, M.J.P. and Herniman, K.A.J. (1979). Observations on transplacental transmission of bluetongue virus in sheep a possible over-wintering mechanism. Res. Vet. Sci., 27, 118-120.
- 35. Sellers, R.F., Gibbs, E.P.J., Herniman, K.A.J., Pedgley, D.E. and Tucker, M.R. (1979). Possible origin of the bluetongue epidemic in Cyprus. August, 1977. J. Hyg. (Camb.), 83, 547-555.
- Polydorou, D., Papasolomontos, P., Hadjisavvas, T.H., Economides, P., Efstathiou, G. and Hadjizenonos, L. and Sellers, R.F., Gibbs, E.P.J., Herniman, K.A.J., Parker, J., Rowe, L.W. Mowat, G.N. and Owens, H. (1980). Investigations on foot and mouth disease vaccines in Cyprus 1972-1975. Bull. Off. Int. Epiz. 92, 863-873.
- 37. **Gibbs**, E.P.J., Smale, C.J. and Voyle, C.A. (1980). Electron microscopy as an aid to the rapid diagnosis of virus diseases of veterinary importance. Vet. Rec. 106, 451-458.
- 38. Kahrs, R.F., **Gibbs**, E.P.J. and Larsen, R.E. (1980). The search for viruses in bovine semen. Theriogenology 14, 151-165.
- 39. McVicar, J.W., Mebus, C.A., Becker, H.N., Belden, C. and **Gibbs**, E.P.J.(1981). Experimental African swine fever in feral pigs. J. Amer. Vet.Med. Assn., 179, 441-446.
- 40. Butler, J.F., Holscher, K.H., Adeyeye, O. and **Gibbs**, E.P.J. (1984). Sampling techniques for burrow dwelling ticks in reference to potential African swine fever virus vectors. Acarology VI 2, 1065-1074.
- 41. Gibbs, E.P.J. (1983). Bluetongue disease. Agri-Practice 4, 31-38.
- 42. **Gibbs**, E.P.J. (1983). Bluetongue an analysis of current problems, with particular reference to the importation of ruminants to the United States. J. Amer. Vet. Med. Assn., 182, 1190-1194.
- 42. **Gibbs**, E.P.J. and Greiner, E.C. (1983). Bluetongue infection and Culicoides species associated with livestock in Florida and the Caribbean region. Proceedings Double Stranded RNA Conference, St. Thomas, Virgin Islands, 1982. Elsevier Press. pp. 375- 382.
- 43. Degner, R.L., Rodan, L.W., Mathis, W.K. and **Gibbs**, E.P.J. (1983). The recreational and commercial importance of feral swine in Florida: relevance to the possible introduction of African swine fever into the USA. Preventive Vet. Med. 1, 371-381.
- 44. Butler, J.F. and **Gibbs**, E.P.J. (1984). Distribution of potential soft tick vectors of African swine fever in the Caribbean region (Acari Argasidae). Preventive Vet. Med., 2, 63-70.
- 45. Greiner, E.C., Garris, G.I., Rollo, R., Jones, J. and **Gibbs**, E.P.J. (1983). Preliminary studies on the Culicoides species associated with ruminants in the Caribbean region. Preventive Vet. Med., 2, 389-399.
- 46. **Gibbs**, E.P.J., Greiner, E.C., Alexander, F.C.M., King, T.H. and Roach, C.J. (1983). A serological survey of ruminant livestock in some countries of the Caribbean region and South America for antibody to bluetongue virus. Vet. Rec. 113, 446-448.
- 47. **Gibbs**, E.P.J., Greiner, E.C., Taylor, W.P., Barber, T.L., House, J.A. and Pearson, J.E. (1983). Isolation of bluetongue virus serotype 2 from cattle in Florida. A serotype of bluetongue virus hitherto unrecognized in the Western Hemisphere. Amer. J.Vet. Res. 44, 2226-2228.
- 48. Gumm, I.D., Taylor, W.P., Roach, C.J., Alexander, F.C.M., Greiner, E.C. and **Gibbs**, E.P.J. (1984). A serological survey of ruminant livestock in some countries of the Caribbean and South America for type-specific antibody to bluetongue virus. Vet.Rec. 114, 635-638.
- 50. **Gibbs**, E.P.J. and Butler, J.F. (1984). African swine fever in the Caribbean and the feral swine of Florida an assessment of risk for the swine industry of the United States. J. Amer. Vet. Med. Assn. 184, 644-647.
- 51. Greiner, E.C., Humphrey, P.P., Belden, R.C., Frankenberger, W.B., Austin, D.H. and **Gibbs**, E.P.J. (1984). Potential tick vectors of African swine fever in Florida: ticks collected from feral swine. J. Wildlife Diseases. 20, 114-119.
- 52. **Gibbs**, E.P.J. and Greiner, E.C. (1985). Serological observations on the epidemiology of bluetongue virus infections in the Caribbean and Florida. Prog. Clin. Biol Res. 178, 563-570.

- Sellers R.F., Bushnell, R.B., Herniman, K.J., Eisa, M., Homan, E.J., Gibbs, E.P., Murray, M.D., Greiner, E.C., Stott, J.L. (1985) WHO/FAO Working Team Report: Epizootiology of Bluetongue Prog Clin Biol Res. 178:699-704.
- 54. Greiner, E.C., Barber, T.L., Pearson, J.E., Kramer, W.L. and **Gibbs**, E.P.J. (1985). Orbiviruses from Culicoides in Florida. Prog. Clin. Biol. Res. 178, 195-200.
- 55. Collisson, E.W., Barber, T.L., **Gibbs**, E.P.J. and Greiner, E.C. (1985). Two electropherotypes of bluetongue virus serotype 2 from naturally infected calves. J. Gen. Virol. 66, 1279-1286.
- 55. Lopez, W.A., Nicoletti, P. and **Gibbs**, E.P.J. (1985). Antibody to bluetongue virus in cattle in Ecuador. Trop. Anim. Hlth. Prod. 17, 183-184.
- 56. Nana-Nukechap, M.F. and **Gibbs**, E.P.J. (1985). Socio-economic effects of African swine fever in Cameroon. Trop. Anim. Hlth. Prod. 17, 82.
- 57. Richardson, C., Taylor, W.P., Terlecki, S. and **Gibbs**, E.P.J. (1985). Observations on transplacental infection with bluetongue virus in sheep. Amer. J. Vet. Res. 46, 1912-1922
- 58. Kramer, W.L., Greiner, E.C., and **Gibbs**, E.P.J. (1985). Seasonal variations in population size, fecundity and parity rates of Culicoides insignis (Diptera Ceratopogonidae) at a cattle ranch in Florida. J. Med. Entom. 22, 153-162.
- 58. Kramer, W.L., Greiner, E.C. and **Gibbs**, E.P.J. (1985). Survey of Culicoides midges associated with cattle in Florida. J. Med. Entom. 22, 153-162.
- 60. Taylor, W.P., Gumm, I.D., **Gibbs**, E.P.J. and Homan, J. (1985). The use of serology in bluetongue epidemiology. Prog. Clin. Biol. Res. 178, 461-468.
- 61. Wilson, J.H., Rubin, H.L., Lane, T.J. and **Gibbs**, E.P.J. (1986). A survey of eastern equine encephalitis in Florida horses: prevalence, economic impact and management practices, 1982-83. Prev. Vet. Med. 4, 261-271.
- 62. Scott, T.W., Olson, J.G., All, B.P., and **Gibbs**, E.P.J. (1988). Detection of eastern equine encephalomyelitis virus antigen in equine brain tissue by enzyme linked immunosorbent assay. Amer. J. Vet. Res. 49, 1716-1718.
- 63. **Gibbs**, E.P.J., Wilson, J.H., All, B.P. (1988). Studies on passive immunity and the vaccination of foals against eastern equine encephalitis in Florida. Proc. Vth International Conference on Equine Diseases. Kentucky. pp. 201-205.
- 64. **Gibbs**, E.P.J., Calisher, C.H., Tesh, R.B., Lazuick, J.S., Bowen, R. and Greiner, E.C. (1989). Bivens Arm virus: a new rhabdovirus isolated from <u>Culicoides insignis</u> in Florida and related to Tibrogargan virus of Australia. Vet. Microbiol. 19, 141-150.
- 65. Greiner, E.C., Alexander, F.C.M., Roach, J., Moe, V., Borde, G., Taylor, W.P., Dickenson, J. and **Gibbs**, E.P.J. (1989). Bluetongue epidemiology in the Caribbean Region: serological and entomological findings from a pilot study in Trinidad and Tobago. Medical and Veterinary Entomology. 3, 101-105.
- Greiner, E.C., Alexander, F.C.M., Roach, J., St John, V.S., King, T.H., Taylor, W.P. and Gibbs, E.P.J. (1989). Bluetongue epidemiology in the Caribbean Region: serological and entomological evidence from a pilot study in Barbados. Medical and Veterinary Entomology 4, 289-295.
- 67. Homan, E.J., Mo, C.L., Thompson, L.H., Barreto, C.H., Oviedo, M-T., **Gibbs**, E.P.J., Greiner, E.C. and the Regional Bluetongue Team. (1990). Epidemiologic study of bluetongue viruses in Central America and the Caribbean: 1986-1988. Am. J. Vet. Res. 51, 1089-1094.
- Greiner, E.C., Knausenberger, W.I., Messersmith, M., Kramer, W.L., and Gibbs, E.P.J. (1990). *Culicoides* (Diptera Ceratopogonidae) associated with cattle in St Croix, Virgin Islands and their relevance to bluetongue viruses. J. Med. Entomol. 27, 1071-1073
- 69. Woods, R.D., Pirtle, E.C., Sacks, J.M. and **Gibbs**, E.P.J. (1990). Serologic survey for transmissible gastroenteritis virus neutralizing antibodies in selected feral and domestic swine sera in the southern United States. J. Wildlife Dis. 26, 420-422.
- 70. Schmitt, B.J., Osorio, F.A., Stroup, W.W., and **Gibbs**, E.P.J. (1991). Detection of antibodies to pseudorabies glycoproteins GX, GI, GIII in naturally infected feral pigs. J. Vet. Diagn. Invest. 3, 344-345.
- 71. Tuekam, T., Greiner, E.C., and **Gibbs**, E.P.J. (1991). Seroepidemiological observations on Bivens Arm virus infections in cattle on St Croix, Puerto Rico, and Florida. Vet. Microbiol. 28, 121-127.

- Van der Leek, M.L., Becker, H.N., Pirtle, E.C., Humphrey, P., Adams, C.L., All, B.P., Erickson, G.A., Belden, R.C., Frankenberger, W.R. and Gibbs, E.P.J. (1991). Observations on the prevalence of antibody to pseudorabies virus (Aujeszky's disease virus) in free-living Florida feral swine. J. Wildlife Dis. 29, 403-409.
- 73. Feller, J.A., Massung, R.F., Turner, P.C., **Gibbs**, E.P.J., Bockamp, E.O., Beloso, A., Talavera, A., Vinuela, E. and Moyer, R.W. (1991). Isolation and molecular characterization of the swinepox virus thymidine kinase gene. Virology 183, 578-585.
- 74. Tanya, V.N., Greiner, E.C. and **Gibbs**, E.P.J. (1992). Evaluation of *Culicoides insignis* (Diptera: Ceratopoginidae) as a vector of bluetongue virus. Vet. Microbiol. 32. 1-14.
- 75. Gibbs, E.P.J., Homan, E.J., Mo, C.L., Greiner, E.C., Gonzalez, J., Thompson, L.H., Oveido, M.T. Walton, T.E. and Yuill, T.M. (1992). Epidemiology of bluetongue viruses in the American Tropics. Proceedings of the 1st Biennial Conference of the American Society of Tropical Medicine, San Juan Puerto Rico. Annals of the New York Academy of Sciences. 653, 243-250.
- 76. **Gibbs**, E.P.J. (1992). Epidemiology of orbivirus infections with particular reference to bluetongue. Proceedings of the 2nd International Conference on Bluetongue, African Horse Sickness, and Related Orbiviruses; OIE, Paris. Edited by T.E. Walton and B.I. Osburn. pp 65-75 CRC Press, Boca Raton.
- 77. Gibbs, E.P.J., Homan, E.J. and the InterAmerican Bluetongue Team (1992). The sentinel herd as a tool for serologic epidemiology. Proceedings of the 2nd International Conference on Bluetongue, African Horse Sickness, and Related Orbiviruses; OIE, Paris. Edited by T.E. Walton and B.I. Osburn. pp 90-98 CRC Press, Boca Raton.
- 78. Homan, E.J., Gibbs, E.P.J., Walker, J.S., Walton, T.E., Yuill, T.M., Gonzalez, J., Barreto, C.H., Greiner, E.C. and the InterAmerican Bluetongue Team (1992). Central American and Caribbean Regional epidemiologic study: antecedents and geographic review. Proceedings of the 2nd International Conference on Bluetongue, African Horse Sickness, and Related Orbiviruses; OIE, Paris. Edited by T.E. Walton and B.I. Osburn. pp 99-105 CRC Press, Boca Raton.
- Greiner, E.C., Mo, C.L., Homan, E.J., Gonzalez, J., Oveido, M-T., Thompson, L.H., Gibbs, E.P.J. and the Regional Bluetongue Team (1993). Epidemiology of bluetongue in Central America and the Caribbean: initial entomological findings. Med.Vet. Entomol. 7. 309-315.
- Van der Leek, M.L., Feller, J.A., Sorenson, G., Isaacson, W., Adams, C.L., Borde, D.J., Pfeiffer, N., Tran, T., Moyer, R.W. and **Gibbs**, E.P.J. (1994). Evaluation of swinepox virus as a vaccine vector in swine using a pseudorabies (Aujeszky's disease virus gene coding for glycoproteins gp50 and gp63. Vet. Rec. 134. 13-18.
- 81. **Gibbs**, E.P.J. and Greiner, E.C. (1994). The epidemiology of bluetongue. Comparative Immunology, Microbiology, and Infectious Diseases 17, 207-220.
- Romero, C.H., Meade., P. Santagata, J., Gillis, K., Lollis, G., Hahn, E.C., and Gibbs, E.P.J. (1997) Genital infection and transmission of pseudorabies virus in feral swine in Florida, USA. Vet. Microbiol. 55, 131-139.
- 83. Hahn, E.C., Page, G.R., Hahn, P.S., Gillis, K., Romero, C. and **Gibbs**, E.P.J. (1997) Mechanisms of transmission of Aujezsky's Disease virus in feral swine in the USA. Vet. Microbiol. 55, 123-130.
- 84. **Gibbs**, E.P.J. (1998). The public health risks associated with wild and feral swine. Rev.sci.tech Off. Int. Epiz. 16: 594-598,
- 85. House, J.A., Kocan, K.M., **Gibbs**, E.P. (2000) A brief history of the Society for Tropical Veterinary Medicine. Ann N Y Acad Sci. 2000;916:xiii-xv.
- 86. Sweat J.M., Abdy, M, Weniger, B.G., Harrington, R., Coyle, B., Abuknesha, R.A., Gibbs, E.P. (2000) Safety testing of needle free, jet injection devices to detect contamination with blood and other tissue fluids. Ann N Y Acad Sci. 916:681-2
- 87. Romero, C.H., Meade, P.N., Schultz, J.E., Chung, H.Y., **Gibbs,** E.P.J., Hahn, E.C., and Lollis, G. (2001). Venereal transmission of pseudorabies viruses indigenous to feral swine. J. Wildlife Diseases 37, 289-296.
- Thurmond, M.C., Gibbs, E.P.J., Brown, C.C., Wagner, G.C., Wilson, T.M., and Lautner, E. (2003) Educational preparedness of veterinarians for foreign animal diseases. J Am. Vet. Med. Ass 222, 1352-1357.

- 89. **Gibbs**, E.P.J. (2003) The foot-and-mouth disease epidemic of 2001 in the UK: implications for the USA and the "war on terror". J Vet. Med. Educ. 30, 121-132
- 90. Sweat, J.M. Johnson, C.M., and **Gibbs** E.P.J (2003) In vitro development and characterization of a manatee bronchial cell line. In vitro Cell. Dev. Biol. 39, 249-256
- 91. Crawford P.C., Dubovi E.J., Castleman W.L., Stephenson I., **Gibbs** E.P, Chen L, Smith C, Hill R.C., Ferro P, Pompey J, Bright R.A., Medina M.J., Johnson C.M., Olsen C.W., Cox N.J., Klimov A.I., Katz J.M., Donis R.O. (2005) Transmission of equine influenza virus to dogs. Science. 310, 482-5.
- 92. **Gibbs**, E.P.J. (2005) Emerging zoonotic epidemics in the interconnected global community. Vet Rec. 157, 673-9.
- 93. Sweat J.M., Johnson C.M., Marikar Y. and **Gibbs** E.P. (2005). Characterization of surface interleukin-2 receptor expression on gated populations of peripheral blood mononuclear cells from manatees, *Trichechus manatus latirostris*. Vet Immunol Immunopathol. 108:269-83.
- Long MT, Jeter W, Hernandez J, Sellon DC, Gosche D, Gillis K, Bille E, Gibbs EP. (2006). Diagnostic performance of the equine IgM capture ELISA for serodiagnosis of West Nile virus infection. J Vet Intern Med. 20:608-13
- Long MT, Gibbs EP, Mellencamp MW, Zhang S, Barnett DC, Seino KK, Beachboard SE, Humphrey PP. (2007) Safety of an attenuated West Nile virus vaccine, live Flavivirus chimera in horses. Equine Vet J.39:486-90.
- 96. Long MT, Gibbs EP, Mellencamp MW, Bowen RA, Seino KK, Zhang S, Beachboard SE, Humphrey PP. (2007). Efficacy, duration, and onset of immunogenicity of a West Nile virus vaccine, live Flavivirus chimera, in horses with a clinical disease challenge model. Equine Vet J.39:491-7.
- 97. Seino KK, Long MT, Gibbs EP, Bowen RA, Beachboard SE, Humphrey PP, Dixon MA, Bourgeois MA. (2007). Comparative efficacies of three commercially available vaccines against West Nile Virus (WNV) in a short-duration challenge trial involving an equine WNV encephalitis model. Clin Vaccine Immunol. 14:1465-71
- 98. **Gibbs**, E.P., Tabachnick,W.J., Holt,T.J., Stallknecht,D.E. (2008) U.S. concerns over bluetongue. *Science* 320: 872 (correspondence)
- 99. **Gibbs** EPJ and Anderson TC (2009). "One World One Health" and the Global Challenge of Epidemic Diseases of Viral Etiology. Vet Italiano 45: 35-44
- 100. **Gibbs** EPJ and Anderson TC (2009). Essential veterinary education: equipping students with an understanding of the need for research in global public health. Rev. Sci. Tech. 28: 663-669
- 101. Osburn B, Scott C, Gibbs, P (2009). One World One Medicine One Health. Emerging Veterinary Challenges and Opportunities Rev. Sci. Tech. 28: 481-486
- 102. Castleman, WL, Powe, JR, Crawford, PC, **Gibbs**, EP, Dubovi, EJ, Donis, RO, and Hanshaw, D (2010) Canine H3N8 influenza virus infection in dogs and mice. Vet Pathol. **47**: 507-517.
- 103. **Gibbs** EPJ and Anderson TC (2010). Equine and canine influenza: a review of current events. Anim Health Res Rev 29:1-9
- 104. Okello, A., **Gibbs** , EPJ., Vandersmissen , A. & Welburn, S. C. (2011) One Health and the neglected zoonoses from the rhetoric to reality. Veterinary Record 169: 281-285.
- 105. Anderson TC, Bromfield CR, Crawford PC, Dodds WJ, Gibbs EP, Hernandez JA (2011). Serological evidence of H3N8 canine influenza-like virus circulation in USA dogs prior to 2004. Veterinary Journal, 191: 312-316
- 106. Anderson, TC, Crawford, PC, Katz, JM, Dubovi, EJ, Landolt, G, and **Gibbs**, EPJ (2012) Diagnostic performance of the canine Influenza A virus subtype H3N8 hemagglutination inhibition assay. J Vet Diagn Invest. 24, 499-508
- 107. Gibbs, S.E. and **Gibbs**, E.P. The Historical, Present, and Future Role of Veterinarians in One Health. Curr Top Microbiol Immunol. 2012 Aug 22. [Epub ahead of print]
- 108. Anderson TC, Crawford PC, Dubovi EJ, **Gibbs** EP, Hernandez JA. (2013). Prevalence of and exposure factors for seropositivity to H3N8 canine influenza virus in dogs with influenza-like illness in the United States. J Am Vet Med Assoc. 242: 209-16.

Other Publications (including full papers published as proceedings).

- 1. **Gibbs**, E.P.J., Rweyemamu, M.M., Johnson, R.H., Osborne, A.D. (1970). Viral infections of the bovine teat. Blue Book (Hoechst) 17, 13-20.
- Donaldson, A.I., Sellers, R.F., Herniman, K.A.J., Ferris, N.P., Gumm, I.D. and Gibbs, E.P.J. (1978). Aerobiology research at the Animal Virus Research Institute, Pirbright, Woking, Surrey. International Aerobiology Newsletter, 1978, 10-12.
- 3. **Gibbs**, E.P.J. (1980). The relevance of virus infections to the international movement of cattle semen. 9th International Congress on Animal Reproduction and Artificial Insemination. Volume III, 220. Madrid, Spain.
- 4. Kahrs, R.F., **Gibbs**, E.P.J. and Larsen, R.E. (1980). Diagnostic techniques for identifying viruses in bovine semen. Proceedings 2nd International Symposium Veterinary Laboratory Diagnosticians 2, 274-276.
- 5. **Gibbs**, E.P.J, Greiner, E.C., Kramer, W.L. and Burridge, M.J. (1981). Bluetongue, its relevance to the Caribbean Region. Inter American Institute for Co-operation on Agriculture, Series Document. (Published in Spanish as #8 below).
- 6. Butler, J.F. and **Gibbs**, E.P.J. (1982). Sampling techniques for burrow dwelling ticks and other arthropods. FAO African Swine Fever Newsletter 20, 11-14
- Degner, R.L., Rodan, L.W., Mathis, W.K. and Gibbs, E.P.J. (1982). The recreational and commercial importance of feral swine in Florida. Florida Agricultural Market Research Center Industry Report 82-1. pp. 1-64.
- 8. **Gibbs**, E.P.J. (1982). Lengua azul resena con enfasis en su importancia en la Region del Caribe. Salud Animal 1, 439-454.
- 9. **Gibbs**, E.P.J., Stoddard, H.L., Yedloutchnig, R.J., House, J.A. and Legge, M. (1983). A vesicular disease of pigs in Florida of unknown etiology. Florida Veterinary Journal, 12, 25-27.
- 10. Gibbs, E.P.J. (1983). Bluetongue a review for clinicians. Florida Veterinary Journal, 12, 33-36.
- Gibbs, E.P.J. (1983). Relationship between the peste-des-petits ruminants virus and other members of the morbillivirus genus. Proc. Intern. Workship IITA, Ibadan, Nigeria. 24-26 Sept. 1980. Ed. D.H. Hill pp. 63-68. Publ. International Livestock Center for Africa, Addis Ababa, Ethiopia.
- Gibbs, E.P.J. and Greiner, E.C. (1984). Observations on the epidemiology of bluetongue virus infections in the Caribbean and Florida. Proc. XIII World Congress of Diseases of Cattle, Durban, Rep. S. Africa. 1, 9-14. Reprinted in the Bovine Practitioner 20, 155-157, 1985.
- 13. **Gibbs**, E.P.J. (1978). Collecting specimens for the laboratory diagnosis of viral diseases. Vet. Rec. In Practice, 1, 21-29. Reprinted in Exotic Diseases Newsletter, FAO. (1984).
- 14. **Gibbs**, E.P.J. (1986). Aspects of international disease control with emphasis on virus diseases. Ann. Proc. Sheep Vet. Soc. 9, 1-5.
- Butler, J.F., Telford, S.R., Milstrey, E.G. Adeyeye, O.A., Beck, A.F., Wilkerson, R.C., Holscher, K.H., and Gibbs, E.P.J. (1986). The natural history of potential vectors of African swine fever. pp. IV 1-22. Proceedings of the 1986 Tropical/Subtropic Agricultural Research. Sponsored by the Caribbean Basin Advisory Group. Gainesville, Florida.
- Gibbs, E.P.J., Greiner, E.C., Homan, E.J., Yuill, T.M., Mo, C.L. and Walton, T.E. (1989). Towards 2000, bluetongue and ecosystems - a New World perspective. Proceedings of the 5th Australian Arbovirus Symposium, Brisbane. pp 293-297. CSIRO/QNMIR, Australia.
- Gibbs, E.P.J.(1989): Future directions for the control of disease risks associated with feral swine. Notes towards a policy on feral swine control. Proceedings of the Symposium on Feral Swine, pp 49- 50, National Livestock Conservation Institute, Orlando, April 1989.
- Gibbs, E.P.J.(1989) Future directions for the control of disease risks associated with feral swine. Where do we go from here? Proceedings of the Symposium on Feral Swine, pp 71-72, National Livestock Conservation Institute, Orlando, April 1989.
- 19. Wilson, J.H. and **Gibbs**, E.P.J. (1991). Strategies for the prevention of eastern equine encephalomyelitis. Proceedings of the 9th Amer. Coll. Vet. Int. Med. Forum. New Orleans, pp 423-425.
- 20. Wilson, J.H., **Gibbs**, E.P.J., and Spalding, M. (1992). Alternate brain sampling technique for the diagnosis of equine viral encephalomyelitis. American Association of Equine Practitioners, San Diego,

- 21. **Gibbs**, E.P.J. (1992). The epidemiology of bluetongue -towards 2000: implications for regulatory control. Proceedings 95th Ann. Mtg. United States Animal Health Association 61-68.
- 22. Wilson, J.H., **Gibbs**, E.P.J., Calisher, C.H., Buergelt, C.D., and Schneider, C.(1995). Investigation of vaccine-induced tolerance to eastern equine encephalitis virus in foals. American Association of Equine Practitioners 41, 178-180.
- 23. **Gibbs**, E.P.J. (2002) Foot-and-Mouth Disease and the involvement of deer; lessons from the 2001 epidemic in the United Kingdom. Proceedings 2002 North American Deer Farmer's Association Annual Conference and World Deer Farming Congress III Austin Texas 293-296
- 24. **Gibbs**, E.P.J. (2003) Bluetongue virus infection of cattle: a significant disease risk or simply a regulatory hurdle to the export/import trade? Florida Beef 2003. 67: 56-60.
- 25. **Gibbs**, E.P.J. (2007) A Global Perspective on Viral Epidemics of the 21st Century: Events of 2005-2007. 4th Pan Commonwealth Veterinary Conference, Barbados. 59-70
- 26. Bokma, B.H., **Gibbs**, E.P.J., Aguirre, A.A. and Kaplan, B (2008). A resolution by the Society for Tropical Veterinary Medicine in support of "One Health". Annals NY Academy of Sciences 1149: 4-8
- 27. Gibbs, E.P.J. (2009) Climate Change and Emerging Diseases. The search for patterns and predictions in a changing world. Symposium on Emerging Vector-Borne Diseases: What's the Risk? AAVLD/USAHA Annual Meeting San Diego Oct 2009 Proceedings of the 113th Ann Mtg United States Animal Health Association 2009, 62-65.
- 28. **Gibbs,** E.P.J (2010) Continental Viral Invaders of the 21st Century. Perspectives on a Turbulent Decade 1999-2009. With a Special Focus on Influenza and Rift Valley Fever. NAVC Orlando, January 2010

Abstracts of Papers presented Oct 2004 – April 2010 (reverse order)

- 1. **Gibbs,** E.P.J. Rift Valley Fever: A Multi-Agency test of Responses to a Hypothetical Introduction to Florida. MedVet Net Annual Conference on One Health, Copenhagen, Denmark, June 2013.
- 2. **Gibbs**, E.P.J. One Health. Closing Remarks for MedVet Net Annual Conference on One Health, Copenhagen, Denmark, June 2013.
- 3. **Gibbs**, E.P.J. Rift Valley Fever: A Multi-Agency test of Responses to a Hypothetical Introduction to Florida. EPIZONE Annual Conference, Brighton, England, June 2012
- 4. **Gibbs**, E.P.J. Who Pays? The Control and Eradication of Disease in the 21st Century. British Cattle Veterinary Association, Southport, UK, November 2009
- 5. **Gibbs**, E.P.J. Global Perspectives on Climate Change and the Changing Ecology of Disease. Would Darwin Care?. British Cattle Veterinary Association, Southport, UK, November 2009
- 6. **Gibbs**, E.P.J. Bluetongue: the Emperor's Suit of Clothes Revisited. British Cattle Veterinary Association, Southport, UK, November 2009
- 7. **Gibbs**, E.P.J. Rift Valley fever and its relevance for wildlife. Wildlife Disease Association Annual Meeting, Washington State, August 2009
- 8. Stasia Bembenek, Greg Christy, Thomas Holt, Jocelyn Mullins, Tineke Kramer and Paul **Gibbs**. Rift Valley Fever: a multi-agency test of Florida's response to an hypothetical introduction to the state. EPI Research Day, February, 2009
- 9. **Gibbs**, E.P.J., Long, M.T., Monath, T.P. The epidemiology of West Nile virus infections in the Americas and the development of chimeric vaccines for horses and humans. *Proceedings of the Society of General Microbiology*. Edinburgh, April 2008.
- 10. Crawford, P.C., Anderson, T.L., Castleman, W.L., Long, M.T., Donis, R.O., Chambers, T.E., **Gibbs**, E.P.J The emergence of canine influenza in the USA: the relationship to equine influenza and developments since discovery in 2004. *Proceedings of the World Association of Veterinary Laboratory Diagnosticians*. Melbourne, Australia, November 2007.
- 11. Crawford, P.C., Anderson, T.L., Castleman, W.L., Long, M.T., Donis, R.O., Chambers, T.E., **Gibbs**, E.P.J The emergence of canine influenza in the USA: developments since discovery in 2004 *Proceedings* of Association Teachers and Veterinary Research Workers, England, April, 2007
- 12. Long, M.T., Seino, K.S., Mellencamp, M.W., Zang, S., Beachboard, S.E., Bourgeois, M., Dixon, M.A., **Gibbs**, E.P.J. 2007. Protection provided by a West Nile virus chimera vaccine in horses 12 months after

vaccination with a single dose. Proceedings of Association Teachers and Veterinary Research Workers, England, April, 2007

- 13. Seino KK, Long MT, Gibbs EP, et al. 2006. Protective Immunity to Intrathecal Challenge to West Nile virus in a Naturally Exposed Horse. American Society Tropical Medicine and Hygiene November, 2006.
- 14. Seino KK, Long MT, Gibbs EP, et al. Investigation into the Comparative efficacy of three West Nile virus vaccines. American Society Tropical Medicine and Hygiene November 12, 2006.
- 15. Long MT, Zaretsky H, Rios L. **Gibbs** EP, et al. 2006. Intrinsic and extrinsic risk factors associated with Eastern equine encephalitis in Florida horses. American Society Tropical Medicine and Hygiene November 12, 2006.
- 16. Anderson TC, Katz JM, **Gibbs** EPJ, Crawford PC. Development of a hemagglutination inhibition assay for diagnosis of canine influenza virus infection. 110th Annual Meeting USAHA and 49th Annual Conference of the American Association of Veterinary Laboratory Diagnosticians, Minneapolis, MN, October 12-18, 2006.
- 17. Anderson TC, Katz JM, **Gibbs** EPJ, Crawford PC. Canine influenza virus agglutination of avian and mammalian red blood cells. *110th Annual Meeting USAHA and 49th Annual Conference of the American Association of Veterinary Laboratory Diagnosticians*, Minneapolis, MN, October 12-18, 2006.
- 18. Crawford PC, Dubovi EJ, Zylich NC, Anderson TC, Donis RO, **Gibbs** EPJ. Syndromic surveillance for canine influenza virus infection in pet dogs in the U.S. *4th International Veterinary Vaccines and Diagnostics Conference*, Oslo, Norway, June 25-29, 2006.
- 19. Crawford PC, Katz JM, Anderson TC, Pompey J, Donis RO, Scott KC, **Gibbs** EPJ. Crossreactivity of antibodies to canine and equine influenza H3N8 virus in naturally infected and vaccinated dogs. *4th International Veterinary Vaccines and Diagnostics Conference*, Oslo, Norway, June 25-29, 2006.
- 20. **Gibbs**, EPJ. The Wind of Change: Epidemics of the 21st Century. Emerging Diseases and Zoonoses Conference, University of Illinois, Urbana Champaign, May 2006
- 21. Crawford PC, Katz JM, Anderson TC, Pompey J, Donis RO, Scott KC, **Gibbs** EPJ. Crossreactivity of antibodies to canine and equine influenza H3N8 virus in naturally infected and vaccinated dogs. *Proc American College of Vet Internal Med*, 24th Ann Scientific Forum, Louisville, KY, May 28-June 3, 2006.
- 22. Crawford PC, **Gibbs** EPJ, Castleman W, Hill R, Dubovi E, Donis R, Katz J. Canine influenza virus: an emerging respiratory pathogen. *Proc American College of Vet Internal Med, 24th Ann Scientific Forum,* Louisville, KY, May 28-June 3, 2006.
- 23. Castleman WL, Crawford PC, **Gibbs** EPJ, Dubovi EJ, Donis RO, Powe JR. Newly emerged respiratory disease in dogs caused by canine H3N8 influenza virus. *American Thoracic Society 2006 International Conference*, San Diego, CA, May 19-24, 2006.
- 24. Castleman WL, Crawford PC, **Gibbs**, EPJ, Dubovi EJ, Donis, RO, Powe JR Pathologic findings in dogs infected with newly emerged canine H3N8 influenza virus. Faseb Journal 20, A214 March 2006.
- 25. Crawford PC, **Gibbs** EPJ, Anderson TC, Castleman WL, Powe J, Hill RC, Dubovi EJ, Zylich N, Kouo T, Payungporn S, Chen L, Pompey J, Katz JM, Donis RO. Emergence of influenza virus in pet dogs. *International Conference on Emerging Infectious Diseases*, Atlanta, GA, March 19-22, 2006.
- 26. **Gibbs** EPJ. Distance learning and developing countries. African workshop, Naivasha, Kenya, University of Edinburgh, October 2005
- 27. Long MT, Gibbs EP, Seino KS, Mellencamp MW, Zang S, Beachboard SE, Humphrey PP. Safety and Efficacy of a Live Attenuated West Nile Virus Chimera Vaccine in Horses with Experimentally Induced West Nile Virus Clinical Disease. 51st Annual Conference of the American Association of Equine Practitioners December 2005.
- 28. **Gibbs** EPJ. Molecular diagnostics and evolution. Proc. American Association of Veterinary Laboratory Diagnosticians, Hershey, Pennsylvania, October 2005
- 29. Crawford PC, Dubovi EJ, Castleman WL, Stephenson I, Chen L, Smith C, Hill RC, Ferro P, Olsen C, Cox NJ, Klimov AL, Katz JM, Donis RO, **Gibbs** EPJ. Equine influenza virus causing an epidemic of respiratory disease in racing greyhounds. *International Union of Microbiological Societies*, San Francisco, CA, July 23-28, 2005.
- 30. **Gibbs,** EPJ. No longer an island; emerging diseases in the interconnected global community. Wooldridge lecture, British Veterinary Association, London, England, September 2005

- 31. **Gibbs,** EPJ. NAREEB Advisory board to US Secretary of Agriculture on BSE, Washington, October 2005
- 32. **Gibbs**, EPJ. Zoonoses and Resource Partitioning. Society Tropical Veterinary Medicine, Hanoi Vietnam, July 2005
- 33. Crawford C, **Gibbs** EPJ, Castleman W, Hill R, Dubovi E, Donis R, Stephenson I, Smith C, Katz J. Influenza virus infection in racing greyhounds. *Proc American College of Vet Internal Med, 23rd Ann Scientific Forum*, Baltimore, MD, June 1-4, 2005.
- 34. Dubovi E, Crawford C, **Gibbs** EPJ, Castleman W, Hill R, Stephenson I, Smith C, Medina M, Balish H, Donis R. Influenza virus infection in racing greyhounds. *Proc 24th Annual Meeting of the American Society for Virology*, Hershey, Pennsylvania, June 1-7, 2005.
- 35. Castleman WL, Crawford PC, Dubovi EJ, **Gibbs** EPJ, Powe J, Donis RO. Pulmonary lesions in dogs naturally and experimentally infected with H3N8 equine influenza virus. *FASEB*, San Diego, CA, April 2-6, 2005.
- 36. Castleman, WL, Crawford, PC, Dubovi, EJ, **Gibbs, EPJ**, Donis, RO. Acute respiratory disease in greyhound dogs infected with H3N8 equine influenza virus. *Proc. 55th Annual Meeting of the American College of Veterinary Pathologists*, Orlando, FL, November, 2004.
- 37. Dubovi, EJ, Crawford, PC, Donis, RO, Castleman, WL, Stephenson, I, **Gibbs, EPJ**. Isolation of equine influenza virus from racing greyhounds with fatal hemorrhagic pneumonia. *Proc.47th Annual Meeting of the American Association of Veterinary Laboratory Diagnosticians*, Greensboro, NC, October, 2004.

Poster presentations are not reported

INVITED LECTURES AND PRESENTATIONS (By Decade)

No records were kept prior to August 1983. Press, television and radio interviews are not recorded.

1983 to 1989

- 1. African swine fever. World Veterinary Congress, Perth, Australia,
- 2. Bluetongue similarities between Floridian and Australian problems. CSIRO Long Pocket Laboratories; Brisbane, Australia.
- 3. African swine fever eradication problems for the Western Hemisphere. James Cook University; Townsville, Australia
- 4. *Serological studies on the epidemiology of bluetongue in Florida and the Caribbean.* International Conference on Bluetongue, Asilomar Conference Center, University of California.
- 5. *African swine fever and bluetongue studies in Florida and the Caribbean.* Division of Arthropod-borne Virus Diseases, CDC, Fort Collins, Colorado.
- 6. *African swine fever and other viral diseases of international importance to Cameroon*. Ministries of Higher Education and Agriculture, Yaounde, Cameroon. University Centre, Dschang, Cameroon.
- 7. *Observations on the epidemiology of bluetongue virus infections in the Caribbean and Florida*. XIII World Congress on Diseases of Cattle, Durban, Republic of South Africa.
- 8. *African swine fever in the Caribbean*. Veterinary Research Institute, Onderstepoort, Republic of South Africa.
- 9. *African swine fever and bluetongue in the Caribbean region and Florida*. Foot-and-Mouth Disease Laboratory, Onderstepoort, Republic of South Africa.
- 10. *Isolation of bluetongue virus type 2 in Florida*. American Veterinary Medical Association, Annual Meeting, New Orleans, LA.
- 11. Aspects of international disease control with emphasis on virus diseases. International Meeting, Sheep Veterinary Society, Edinburgh, Scotland.
- 12. *Eastern equine encephalitis in Florida*. American Society Tropical Medicine and Hygiene, Annual Meeting in Miami.

- 13. *The ecology of eastern equine encephalitis in Florida*. USDA Insects Affecting Man and Animals Laboratory Gainesville.
- 14. Bluetongue in beef cattle in Florida. Florida Veterinary Medical Association, Orlando, Florida.
- 15. *Research on foreign animal diseases at the University of Florida*. US Animal Health Association, Louisville, Kentucky.
- 16. Bluetongue in the Caribbean. Trinidad and Tobago Veterinary Services, Port-of-Spain, Trinidad.
- 17. *Vaccination against eastern equine encephalitis in Florida*. American Society Tropical Medicine and Hygiene, Annual Meeting, Denver, Colorado.
- 18. *Rapid diagnosis of eastern equine encephalitis virus infections*. American Society Tropical Medicine and Hygiene, Annual Meeting, Denver, Colorado.
- 19. African swine fever, bluetongue, eastern equine encephalitis and other arboviruses of relevance to Florida and the Caribbean. National Animal Disease Center, USDA, Ames, Iowa.
- 20. *Bluetongue program in Caribbean and Central America*. InterAmerican Institute for Cooperation on Agriculture Resantillas IV and Labantillas II. Georgetown, Guyana.
- 21. Veterinary vaccines; past, present and future. Florida Veterinary Medical Association, Orlando Florida.
- 22. Foreign Disease Planning Conference. Interamerican Institute for Cooperation on Agriculture, Barbados. . (Panel Member)
- 23. *Vaccination studies on eastern equine encephalitis in Florida*. Vth International Conference on Equine Diseases, Lexington, Kentucky.
- 24. A new rhabdovirus isolated from Culicoides in Florida. US Animal Health Association, Salt Lake City.
- 25. Bluetongue studies in Central America and the Caribbean. US Animal Health Association, Salt Lake City.
- 26. *Isolation of a new rhabdovirus from Culicoides insignis in Florida*. American Society Tropical Medicine and Hygiene, Annual Meeting, Los Angeles, California.
- 27. Koret School of Veterinary Medicine, Israel. Two week lecture series on viral diseases and epidemiology.
- 28. Veterinary Services and Animal Health, Israel. *Two day continuing education course on foreign and high priority diseases.*
- 29. African swine fever. University of Heredia, Costa Rica, Wildlife diseases program.
- 30. *New rhabdoviruses in the Southern States*. Animal Disease Research Workers in the Southern States, Baton Rouge, Louisiana.
- 31. Arbovirus diseases in Florida. Florida Medical Entomology Laboratory, Vero Beach, Florida.
- 32. Agriculture Canada, Ottawa. Two week lecture series on arbovirus diseases of importance to Canada.
- 33. *Epidemiology of bluetongue in the Caribbean Region*. Joint Meeting of the Caribbean and Canadian Veterinary Medical Associations in Georgetown, Guyana.
- 34. *Feral swine disease problems*. United States Animal Health Association, Pseudorabies Committee, Little Rock, Arkansas.
- 35. Feral Swine Policy for disease control programs. Livestock Conservation Institute, Orlando.
- 36. *Towards 2000, bluetongue and ecosystems- a new world perspective.* 5th Australian Arbovirus Symposium, Brisbane, Australia.

1990 - 1999

- 37. Encephalitis in horses in the SE States. USDA APHIS, Ames Iowa.
- 38. Bluetongue in the Caribbean and Central American Regions. USDA/APHIS, Puerto Rico.
- 39. Virus Diseases of Importance in the Caribbean. School of Veterinary Medicine, Mount Hope, Trinidad.
- 40. Arboviruses of veterinary concern in the Caribbean Region. Centers for Disease Control, Puerto Rico.
- 41. Oral vaccination. United States Animal Health Association, Pseudorabies Committee,
- 42. Bluetongue in the Caribbean and Central America, Bovine spongiform encephalopathy; Viral encephalitides; and Genetic engineering and vaccines. A series of presentations at.Joint Meeting of the Caribbean and Canadian Veterinary Medical Associations, Antigua.
- 43. Arbovirus vaccines. Pasteur Merieux Institute, Lyon, France.
- 44. *Genes, dreams and schemes*. Texas A & M University, College of Veterinary Medicine, College Station, Texas

- 45. Arbovirus diseases in the Caribbean Region; how great a threat are they to the USA? Annual Meeting of the American Society for Veterinary Tropical Medicine, Puerto Rico.
- 46. *Bluetongue and pseudorabies. The southern states as the Achilles heel of the USA*. Texas A & M University, College of Veterinary Medicine, College Station, Texas.
- 47. Bluetongue and problems of international trade. American Water Buffalo Association, Gainesville.
- 48. *Bio-engineered oral vaccines*. Consultative Group on Feral Swine and the Risks Presented to US Agriculture. USDA Washington
- 49. *Epidemiology of orbiviruses*. Second International Symposium on Bluetongue, African Horse Sickness and Related Orbiviuses, OIE, Paris.
- 50. Bluetongue and its international relevance; ecological concepts and government regulations. USDA Training Program on Foreign Animal Diseases, North Carolina State University.
- 51. Workshop leader on "Research on Tropical Diseases"; and Task Force Director of simulated "Bovine spongiform encephalopathy outbreak in Florida". USDA Training Program on Foreign Animal Diseases, North Carolina State University.
- 52. USDA Training Program on Virus Diseases, Puerto Rico.
- 53. USDA Training Program on Pseudorabies, Jacksonville.
- 54. *The epidemiology of bluetongue towards 2000; implications for regulatory control.* USAHA, 95th Annual Meeting, San Diego.
- 55. Arthropod-borne diseases of veterinary importance. Florida Mosquito Control Association, Daytona. ""
- 56. *Bio-engineered oral vaccines*. Consultative Group on Feral Swine and the Risks Presented to US Agriculture. USDA Atlanta.
- 57. *Wildlife vaccines and the oral vaccination of wildlife*. New Generation Vaccines -the Role of Basic Immunology. NATO Advanced Studies Institute, Sounion, Greece.
- 58. Future Vaccines. American Association of Veterinary Laboratory Microbiologists, Orlando.
- 59. *Pseudorabies (Aujeszky's Disease) in feral swine*. Congress of the International Pig Veterinary Society, The Hague, Netherlands.
- 60. *Pseudorabies and bluetongue and the Southern States as the Achilles heel of the USA*. Kansas State University, Manhattan, Kansas
- 61. Biotechnology and Veterinary Research. University of Tennessee, Knoxville.
- 62. Biotechnology; genes, dreams and schemes. University of London, London.
- 63. *Swinepox virus as a vector system for pseudorabies vaccines*. USDA, APHIS, Center for Animal Disease Control, Fort Collins, Colorado.
- 64. *Swinepox virus as vector system for an immunoneutering vaccine*. USDA, APHIS, Denver Wildlife Center, Colorado.
- 65. American Mosquito Control Association 59th Annual Meeting, Fort Myers. "Arthropod-borne diseases of veterinary importance" Symposium on Eastern equine encephalitis: a) the virus: taxonomy, biochemistry and laboratory detection methods; b) the diseases in livestock.
- 66. The need for a contraceptive vaccine to immunoneuter feral swine. Contraception in Wildlife Management, International Symposium, Denver, Colorado.
- 67. A veterinary perspective on vaccines. University of Illinois, Champaign Urbana.
- 68. *Transmission of pseudorabies between domestic and feral swine*. APHIS Feral Swine Advisory Committee, Arlington. Texas.
- 69. *Biotechnology and Vaccination*. a) Veterinary School Tokyo; b) Nippon Institute for Biological Sciences, Tokyo; c) Medical School, University of Okayama;
- 70. Research in universities and its relationship to international trade. Constraints and opportunities as illustrated by the development of vaccines and diagnostic tests. Joint Meeting American Dairy Science Association and American Society of Animal Science, Minneapolis, Minnesota.
- 71. *Eastern equine encephalitis in Florida, the relevance to the emu industry*. Extension Seminar Series, Volusia Community College and Mosquito Control District; DeLand, Florida,
- 72. *Transmission of pseudorabies virus in feral swine in Florida*. NC 197 Symposium, Archbold Biological Research Station, Lake Placid, Florida,

- 73. *Emerging Diseases in a New World Order*. Phi Zeta Research Day College of Veterinary Medicine, University of Illinois.
- 74. Aujeszky's Disease in wild swine; a comparison of the North American and European situation. German Federal Epidemiology Research Center, Wusterhausen, Germany.
- 75. *Emerging Diseases in a New World Order*. Joint USDA State of Florida Training Program, Gainesville, Florida.
- 76. *Feral swine; a world-wide problem.* Feral swine Conference, USDA, APHIS and Department of Agriculture State of Florida. Orlando, Florida.
- 77. Biological Warfare.3rd International Conference on Public Relations, Gainesville, Florida.
- 78. *Update on model systems to detect viral contamination*. Needleless Vaccination Conference, WHO/NIH Washington DC.

2000-2009

- 79. *West Nile Virus and the implications for Florida*. Workshop. January 2000, US Equestrian Team and Department of Agriculture, Wellington, Florida.
- 80. *Foot-and-Mouth Disease in Deer*. Joint meeting of the Soc Trop Vet Med and the Wildlife Disease Association, South Africa, July 2001.
- 81. Foot-and-Mouth Disease in deer, the potential for infection in the USA. USAHA, Hershey, November 2001.
- 82. *Foot-and-Mouth Disease and Bovine spongiform encephalopathy*. A series of lectures (to producers, veterinarians and restauranteurs,) at 6 different sites around Florida in response to the UK epidemics. Organized through the State Veterinarian's Office and the Farm Bureau.
- 83. The science of Foot-and-Mouth Disease. North American Veterinary Conference Orlando January 2002
- 84. Foot-and-Mouth Disease. Florida Cattlemen's Association Annual Meeting Orlando January 2002
- 85. Foot-and- Mouth Disease in deer. International Deer Convention, Austin Texas. February 2002. .
- 86. EU &US Policy Dialogue on *BSE and FMD* Columbia Missouri, April 2002. Keynote speaker and rapporteur.
- 87. Foot-and-Mouth Disease. National Auctioneers Annual Convention, Orlando. July 2002.
- 88. *Foot-and-mouth disease in the UK: An American Perspective*. World Veterinary Congress Tunis. September 2002.
- 89. *Epidemics, Bioterrorism and the New World.* Department of Microbiology Medical School, St Georges University, February 2003. St Georges, Grenada
- 90. Bioterrorism and Foreign Animal Disease. Seminole tribe of Florida, Big Cypress. May 2003
- 91. Foot-and-mouth disease. Florida Animal Disaster/Bioterrorism Conference Orlando May 2003
- 92. Foot-and-mouth Disease An analysis of risk. Society Tropical Veterinary Medicine, Foz de Iguacu, Brazil. July 2003
- 93. *Ecology and Animal Health*. Keynote speaker. Society Tropical Veterinary Medicine, Foz de Iguacu, Brazil. July 2003
- 94. *West Nile Virus: A threat for the Americas*. Long, M and Gibbs E Paul J.: Society Tropical Veterinary Medicine, Foz de Iguacu, Brazil. July 2003 (Paper presented by Gibbs)
- 95. Foot-and- mouth disease in deer; recent developments of relevance to North America. Wildlife Disease Association Convention. Saskatoon, August 2003
- 96. Zoonoses. North American Veterinary Conference, Orlando, January 2004
- 97. Epidemics of the 21st Century. St George's School of Veterinary Medicine, Grenada March 2004
- 98. *Item writing for the qualifying examination of PAVE*. St George's School of Veterinary Medicine, Grenada, March 2004.
- 99. BSE: is your hamburger safe? Alachua Animal Activists, Gainesville, March 2004
- 100. Epidemics of the 21st Century and their relevance to Ireland. College of Veterinary Medicine, University College, Dublin, Ireland, July 2004
- 101. BSE: an international perspective. American Biological Safety Association, San Antonio, October 2004
- 102. Epidemics and Zoonoses of the 21st Century. Caribbean Veterinary Association. Trinidad, November 2004

103. West Nile in horses. Caribbean Veterinary Association. Trinidad, November 2004

- 104. Distance learning in the developing world. FAO/IAEA Vienna, Austria, November 2004
- 105. West Nile vaccine development. Intervet San Antonio, Texas February 2005
- 106. State Agricultural Response Team Foreign Animal Diseases. Several Locations. March 2005
- 107. Epidemics and Veterinary Medicine. University of Edinburgh, May 2005
- 108. Canine influenza epidemiology. University of Hong Kong, July 2005
- 109. Influenza and the sports of kings and common men. Hong Kong Veterinary Association, July 2005
- 110. Diagnostics and Emerging Diseases. Government Veterinary Services, Hong Kong. July 2005
- 111. Zoonoses and Resource Partitioning. Society Tropical Veterinary Medicine, Hanoi Vietnam, July 2005
- 112. West Nile in the USA and Implications for Asia. Society Tropical Veterinary Medicine, Hanoi Vietnam, July 2005
- 113. Canine Influenza and Relevance to Avian Influenza. Society Tropical Veterinary Medicine, Hanoi Vietnam, July 2005
- 114. Canine Influenza. International Virology Congress, San Francisco, August 2005
- 115. Emerging Diseases and Zoonoses. Cuban Society for Science. Havana, Cuba, August 2005
- 116. Bluetongue; a global review. Cuban Society for Science. Havana, Cuba, August 2005

117. *No longer an island; emerging diseases in the interconnected global community.* Wooldridge lecture, British Veterinary Association, London, England, September 2005

- 118. Distance learning and developing countries. African workshop, Naivasha, Kenya, October 2005
- 119. *Bovine Spongiform Encephalopathy*. NAREEB Advisory Board to US Secretary of Agriculture, Washington, October 2005
- 120. *Molecular diagnostics and evolution*. American Association of Veterinary Laboratory Diagnosticians, Hershey, Pennsylvania, October 2005
- 121. Ecological perspectives on H5N1 avian influenza. University of Minnesota Winter Institute, Gainesville, January 2006
- 122. Avian Influenza H5N1: a promiscuous and dangerous virus. North American Veterinary Conference, Orlando, January 2006
- 123. *The Wind of Change: Epidemics of the 21st Century*. Key note speaker Emerging Diseases and Zoonoses Conference, University of Illinois, Urbana Champaign, May 2006
- 124. *Doomsday Scenario of Pandemic Disease*. Foresight Analysis for American Association of Veterinary Medical Colleges and Schools, Fort Collins, June 2006
- 125. Avian Influenza. Training Session, Department of Agriculture and Consumer Affairs, State of Florida, Gainesville, May 2006
- 126. Teach the Teacher: Emerging Diseases for Middle and High Schools in Alachua County. Gainesville, June 2006
- 127. Veterinary Medicine and the Alleviation of Global Poverty. Council for Scientific Editors, Tampa, May 2006
- 128. Epidemics. PK Yonge High School, Gainesville, September 2006
- 129. Teach the Teacher: Emerging Diseases Updated. Florida Association of Science Teacher's Symposium, Gainesville, October 2006
- 130. Avian Influenza. Quail Short course, Monticello, October 2006
- 131. Emerging Diseases: Scientific Hype or Justified Concern for the Small Animal Practitioner? Kansas City Veterinary Medical Association, Kansas City, October 2006
- 132. *Emerging Diseases of relevance to the Caribbean*. Key Note lecture to Caribbean Veterinary Association, Grenada, November 2006 (also given at University of Virgin Islands).
- 133. Avian influenza, H5N1, and pandemic human influenza. Distinguished Alumni Lecturer University of Florida, November 2006
- 134. Avian influenza update. State Agricultural Response Team meeting, Gainesville, December 2006
- 135. *Global Perspective on recent Epidemics of Zoonotic Importance*. Teleconference Network of Texas, University of Texas Health Science Center, San Antonio, March 2007
- 136. *Canine Influenza*. Association Veterinary Teachers and Research Workers, Scarborough, England , March 2007

- 137. West Nile Vaccine Development. Association Veterinary Teachers and Research Workers, Scarborough, England, March 2007
- 138. Avian Flu. Somewhere over the rainbow; why don't we have avian flu in the US? Extension Symposium on Zoonoses. University of Florida May 2007 (Symposium co-organizer)
- 139. *The Wind of Change; New and Emerging Diseases in the 21st Century.* Florida Department of Health Epidemiology Conference, Daytona, May 2007
- 140. *Epidemics of the 21st Century; Why SART is so important*. State Agricultural Response Team Annual Conference, St Petersburg, May 2007
- 141. Foot-and-Mouth Disease. Workshop on Catastrophic Diseases of Wildlife, USDA/CSU Colorado, August 2007
- 142. Bioterrorism. Florida Veterinary Medical Association, Kissimmee, Florida, September 2007
- 143. *Influenza: why it continues to make headlines*. Veterinary Medicine Showcase, University of Florida, September 2007
- 144. *The Challenges of Emerging Viral Infections*. Veterinary Laboratory Association Sanibel Island, Florida, October 2007
- 145. Foot-and-mouth disease in the UK August 2007. United States Animal Health Association, Reno, USA, October 2007
- 146. *Continental Viral Invaders of the 21st Century*. 4th Pan Commonwealth Veterinary Conference, Barbados, November, 2007
- 147. *Climate Change and the Dissemination of Animal Disease*. 4th Pan Commonwealth Veterinary Conference, Barbados, November, 2007
- 148. Influenza (Avian, Equine & Canine) Events Since 2004. 4th Pan Commonwealth Veterinary Conference, Barbados, November, 2007
- 149. The emergence of canine influenza in the USA: the relationship to equine influenza and developments since discovery in 2004. World Association Veterinary Laboratory Diagnosticians, Melbourne, Australia, November 2007
- 150. Bursting Bubbles: An American Perspective on the Epidemics of the 21st Century. Australian Animal Health Laboratory, Geelong, Australia, November 2007
- 151. *Canine Influenza and West Nile: Emerging Disease Updates from Florida*. School of Veterinary Medicine, University of Melbourne, Australia, November 2007
- 152. *Emerging Diseases: The "Wind of Change" & "One Health"*. Australian Society of Microbiology. Overseas Invited Lecturer Seminars given to Melbourne and Adelaide Branches of ASM, November, 2007
- 153. Foot-and-Mouth Disease and Bluetongue. Global Events in 2007 and Implications for the Deer Industry and Wildlife in Florida. Animal Industry and Technical Council to State of Florida, Department of Agriculture and Consumer Affairs. Gainesville, Florida, January 2008
- 154. Viral Epidemics and Zoonoses: 2007 Global Update. North American Veterinary Conference. Orlando, Florida January 2008
- 155. *Emerging and Transboundary Diseases*. Preparation for Candidates to American College for Preventive Medicine. San Antonio March 2008
- 156. The epidemiology of West Nile virus infections in the Americas and the development of chimeric vaccines for horses and humans. Society for General Microbiology, Edinburgh, April 2008.
- 157. Bluetongue Implications for Florida: Global Events in 2007. Florida Cattlemen's Association, Marco Island, Florida, June 2008
- 158. *The Importance of Emerging Pathogens and Their Resultant Infectious Diseases in our Global Community.* Science Teachers of Florida, Gainesville, July 2008
- 159. *A global overview of current events with bluetongue*. Special Symposium on BTV8 and its relevance to North America. USDA APHIS, Denver, July 2008
- 160. *The epidemiology, prevention and control of canine influenza in kennels and among greyhounds*. One Health Symposium. Amer Vet Med Association Congress. New Orleans, July 2008
- 161. *Emerging Diseases: Post Cards from around the world*. University of Edinburgh Summer School for MSc Students, Kampala Uganda, August 2008

- 162. A global overview of current events with bluetongue with particular focus on North America. Bluetongue Advisory Committee to Defra, UK. August 2008
- 163. *Rift Valley Fever*. A 3 day multi agency exercise. Writer, coordinator, and presenter. Emergency Operations Center Tallahassee November 2008
- 164. *Emerging and Transboundary Diseases*. Preparation for Candidates to American College for Preventive Medicine. Orlando January 2009
- 165. *Continental Invaders.* A series of talks on Emerging Diseases. Virginia Veterinary Medical Association Annual Meeting. Roanoke Virginia February 2009
- 166. *Emerging Diseases and Wildlife Issues*. Government Veterinary Services of Costa Rica, San Jose, March 2009
- 167. One World: One Health. With an Emphasis on Continental Invaders & Events in the New World. University of Utrecht. Utrecht, Holland. March 2009
- 168. *Rift Valley fever and its relevance for wildlife*. Wildlife Disease Association Annual Meeting, Washington State, August 2009
- 169. Climate Change and Emerging Diseases. The search for patterns and predictions in a changing world. Symposium on Emerging Vector-Borne Diseases: What's the Risk? AAVLD/USAHA Annual Meeting San Diego Oct 2009
- 170. *Critique of Rift Valley Fever Interagency Exercise in Florida November 2008*. USAHA Foreign and Emerging Diseases Committee. San Diego October 2009
- 171. *Who Pays? The Control and Eradication of Disease in the 21st Century.* Key note speaker British Cattle Veterinary Association, Southport, UK, November 2009
- 172. *Global Perspectives on Climate Change and the Changing Ecology of Disease. Would Darwin Care?* British Cattle Veterinary Association, Southport, UK, November 2009
- 173. Bluetongue: the Emperor's Suit of Clothes Revisited. British Cattle Veterinary Association, Southport, UK, November 2009

2010-

- 174. Continental Viral Invaders of the 21st Century. Perspectives on a Turbulent Decade 1999-2009; with a Special Focus on Influenza and Rift Valley Fever. NAVC Orlando, January 2010
- 175. One World, One Health, One Future, Who Pays? Detection, Prevention, Control, and Eradication of Emerging and Pandemic Diseases in a Changing World. Key note speaker at One Health Illinois Summit. University of Illinois, Champaign Urbana. February 2010
- 176. *Rift Valley Fever*. A 2 day multi agency exercise. Writer, coordinator, and presenter. Emergency Operations Center, San Juan, Puerto Rico, May 2010
- 177. *Rift Valley Fever*. A 2 day multi agency exercise. Writer, coordinator, and presenter. Emergency Operations Center, St Croix, May 2010 (Different Scenario from Puerto Rico)
- 178. *Rift Valley Fever*. A Multi-Agency Test of Florida's Response to a Hypothetical Introduction to Florida. Howard Hughes Medical Institute Summer Institute, University of Florida. July 2010
- 179. *The Global Eradication of Rinderpest and its Significance for "One World :One Health"* One Health Initiative Symposium: Vaccination of Animals for the Prevention and Control of Zoonotic Diseases. American Society for Tropical Medicine and Hygiene and Society for Tropical Veterinary Medicine Atlanta. November, 2010
- 180. Bluetongue: A global problem. Florida Cattleman's Association. Boca Raton, November 2010
- 181. New World Screw Worm. Multi Agency 2 day Exercise, Emergency Operations Center Tallahassee, January 2012
- 182. *Rift Valley Fever: A Multi-Agency test of Responses to a Hypothetical Introduction to Florida*. EPIZONE Annual Conference, Brighton, England, June 2012
- 183. Challenges for the Veterinary Profession in 2012. Rotary Club, Builth Wells, Wales, UK, September 2012
- 184. *The UN's role in "One Health" and the Control of Disease*. United Nations Association of Gainesville, Gainesville, September 2012

- 185. *The Epidemiology of Bluetongue*. Workshop on Orbivirus Gap Analysis (Research Needs) organized by USDA, Manhattan, Kansas, May 2013
- 186. One Health. College of Public Health Summer School at University of Florida, Gainesville, Florida, May 2013
- 187. *One Health and Climate Change*. College of Public Health Summer School at University of Florida, Gainesville, May 2013.
- 188. *Rift Valley Fever: A Multi-Agency test of Responses to a Hypothetical Introduction to Florida*. MedVet Net Annual Conference on One Health, Copenhagen, Denmark, June 2013.
- 189. *One Health*. Closing Remarks for MedVet Net Annual Conference on One Health, Copenhagen, Denmark, June 2013.
- 190. One Health Programs at the University of Florida Special Seminar, College of Veterinary Medicine, University of Copenhagen, June 2013

INTRAMURAL and STATE RESEARCH FUNDING 1979 to 2008 E.P.J. Gibbs and colleagues.

Grant Agency	Principal Investigator	Project Title	Project Period	Total Direct Costs
State	Gibbs & Greiner	Diagnosis of bluetongue virus infections in ruminants/arthropods	01/80 - 01/86	\$23,000
State	Gibbs & Wilson	Ecology of eastern equine encephalitis in Florida	06/86 - 06/87	\$3,000
NIH	Greiner, Butler & Gibbs	Vector competence of hematophagous arthropods for bluetongue virus	06/83 - 06/84	\$4,500
State	Gibbs, Moyer & Stephens	Development of a swinepox-pseudorabies recombinant virus for oral vaccination	02/88 - 04/89	\$16,149
State	Greiner, Gibbs Shroyer & Baker	Vector competence of Culicoides insignis for bluetongue virus	04/89 - 08/89	\$7,500
US AID	Stephens, Gaskin, & Gibbs	PCR for diagnosis of CAE	07/90 - 06/91	\$10,000
State	Romero, Gibbs	Development of a novel capripoxvirus recombinant vector for vaccination of ruminants in North America.	10/94 - 09/96	\$15,000
Pari- Mutuel	Small, Bender, Edens, Thompson, & Gibbs	Mucosal immunization of horses against influenza.	07/96 - 10/98	\$120,000
Pari- Mutuel	Crawford, Gibbs Castleman& Hill	Investigations into the etiology of severe acute respiratory disease in racing greyhounds	07/03-06/06	\$300,000
Pari- Mutuel	Gibbs, Long, & Crawford	Pathogenicity for horses of an equine influenza virus (H3N8) isolated from racing greyhounds in Florida.	07/04 – 06/07	\$75,000
Dept Agric &Consu mer Affairs	Gibbs	Development of Teaching Materials for State Agricultural Response teams	07/05-07/06	\$8,000
Dept Agric &Consu mer Affairs	Gibbs	Development of Scenario for Rift Valley Fever Exercise	07/08 -11/08	\$15,000

Grant Agency	Principal Investigator	Project Title	Project Period	Total Direct Cost
USDA	Gibbs & Butler	Potential arthropod vectors of African swine fever in the S.E. States and Caribbean	06/80 - 06/83	\$150,000
USDA	Gibbs & Greiner	Identification of the arthropod vectors of bluetongue virus in Florida	08/79 - 03/82	\$96,000
USDA	Gibbs & Greiner	Ectoparasites of feral pigs in Florida as possible vectors of African swine fever	01/80 - 01/82	\$81,000
USDA	Butler & Gibbs	Ecology of potential arthropod vectors of African swine fever	06/83 - 06/86	\$150,000
IICA	Gibbs & Greiner	Serological and entomological studies on bluetongue in the Caribbean	08/80 - 07/84	\$12,000
AVMA	Gibbs & Wilson	Improved programs for control of eastern equine encephalitis in Florida	12/84 - 12/85	\$11,250
Naval Medical Research	Gibbs & Wilson	Remote sensing and rapid diagnosis for eastern equine encephalitis infections	03/86 - 03/91	\$63,000
USDA, OICD, OIRSA, & IICA	Alexander* - IICA Barreto - OIRSA Gibbs & Greiner - University of Florida Homan & Yuill - University of Wisconsin Walton- ARS, USDA	Epidemiology of Bluetongue in Central America and Caribbean	05/86 - 05/89 06/89 - 05/92	\$437,000 \$500,000
USDA	Gibbs & Becker	Impact of pseudorabies infections in Florida feral swine on domestic swine production in the USA	05/86 - 05/86	\$10,000
USDA	Butler & Gibbs (Co- operator)	Characterization of host/tick interaction for vectors of African swine fever in the Caribbean	07/86 - 06/88	\$105,000
USDA	Gibbs and Moyer	Development of a swinepox recombinant vaccine for oral vaccination.	09/89 - 09/92	\$220,000
USDA	Gibbs and Moyer	Renewal of above award	09/92 - 09/94	\$120,000

EXTRAMURAL RESEARCH FUNDING: 1979 to 2012 E.P.J. Gibbs and colleagues

SK Beecham USDA	Gibbs	Development of recombinant vaccines for swine	09/92 -	\$502,933
	Gibbs and Hahn	Characterization of pseudorabies transmission from feral to domestic swine	02/96 01/93 - 09/95	\$170,000
USDA	Romero and Gibbs	Characterization of pseudorabies transmission from feral to domestic swine.	10/95 - 09- 96	\$118,000
USDA	Hahn and Gibbs	Molecular characterization of pseudorabies	01/93 - 10/96	\$150,000
USDA (OICD)	Gibbs	Diagnosis of swine diseases in Indonesia	01/93 - 12/94	\$10,000
USDA	Romero, Gibbs , & Hahn	Characterization of pseudorabies transmission from feral to domestic swine	10/95 - 09/96	\$110,000
APHIS USDA	Romero & Gibbs	Characterization of pseudorabies transmission from feral to domestic swine	10/97 - 09/98	\$91,418
Hoechst- Roussel/I	Gibbs	Evaluation of recombinant herpes vectored vaccines	01/96 - 09/00	\$2.2mi
ntervet National Pork Producer s Council	Bender, Small, & Gibbs .	Mucosal immunization of pigs against influenza	06/97 - 05/98	\$17,913
American Lung Assoc. of Florida	Bender, Small, & Gibbs .	Mucosal immunization of pigs against influenza	07/97 - 06/98	\$59,932
CDC/Am -O- Jet/Felton	Gibbs	Evaluation of viral contamination by Needle Free Jet guns	12/98 - 11/01	\$16,000
Medical **CSRS NRI	Gibbs/STVM	Emerging Diseases and the New World Order.	12/98 - 11/99	\$8,700
**Т- 5тар	Gibbs/STVM	Emerging Diseases and the New World Order.	12/98 - 11/98	\$5,000
STAR **APHIS	Gibbs/STVM	Emerging Diseases and the New World Order.	03/99 - 04/00	\$10,000
**ARS	Gibbs/STVM	Emerging Diseases and the New World Order	03/99-04/00	\$10,000
**Merial	Gibbs/STVM	Emerging Diseases and the New World Order.	03/99 – 04/00	\$10,000
**Fort Dodge	Gibbs/STVM	Emerging Diseases and the New World Order.	04/00 03/99 – 04/00	\$500

Intervet	Long & Gibbs	Evaluation of a recombinant product to protect horses from West Nile virus infection	07/03-12/05	Approx \$2 mi (Animal costs were not fixed)
Intervet	Crawford, C and Gibbs, P	Evaluation of the safety and efficacy of intranasal and parenteral equine influenza vaccines for protection of racing greyhounds against canine influenza	02/05 -12/05	\$54,230
USDA	Long MT, Gibbs EP.	Surveillance of arboviruses in Florida horses and animals of agricultural value: test development, equine vector ecology, and industry outreach. USDA.	2005/2006	\$219,000
American Kennel Club	Crawford C Gibbs EPJ	Modeling the epidemiology of canine influenza	2008/2010	\$100,000
*Alphabetical listing		**Conference support for Society of Tropical Veterinary	Medicine Bienn	nial Meeting

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