### **CURRICULUM VITAE**

Carina Gullboij Maria Blackmore/ M.S. Vet. Med., Ph.D., Dipl. ACVPM, CPM

State Public Health Veterinarian
Deputy State Epidemiologist
Division of Disease Control and Health Protection
Florida Department of Health
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### PERSONAL INFORMATION

Country of Citizenship: United States
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## **EDUCATION**

Certificate in Public Management 2013. Florida State University

**Doctor of Philosophy** 1996. University of Notre Dame, Notre Dame, Indiana. Department of Biological Sciences. Dissertation: The epizootiology of Cache Valley and Potosi viruses (<u>Bunyaviridae</u>) in northern Indiana.

**Master of Science in Veterinary Medicine** 1989. Swedish University of Agricultural Sciences, Uppsala, Sweden. (Equivalent of an American DVM degree)

**Chemistry** 1983-84, 40p (40 weeks of full time studies), Gothenburg University, Gothenburg, Sweden.

### LICENSES AND BOARD CERTIFICATIONS

**General License to Practice Veterinary Medicine** in Sweden, Norway and Finland 1989. **Diplomate of the American College of Veterinary Preventive Medicine**, 2009

## WORK EXPERIENCE

# **Deputy State Epidemiologist,** Florida Department of Health 9/13-present

Serves as the senior epidemiology advisor for epidemiologically related concerns agency wide. Provides leadership and strategic vision for epidemiological functions agency wide. Serves as the Division liaison to the Department's Office of Communication.

## **Interim State Epidemiologist**, Florida Department of Health 07/12-09/13

Serves as the senior epidemiology advisor for epidemiologically related concerns agency wide. Serves as an agency spokesperson on infectious disease and environmental epidemiology issues. Provides leadership and strategic vision for epidemiological functions agency wide. Serves as incident commander during outbreak response.

**Chief Science Officer,** Division of Disease Control and Health Protection. 01/13-present Serves as the senior epidemiology advisor for the Division of Disease Control and Health Protection. Provides strategic vision, document review and project coordination. Supports epidemiology activities throughout the Division.

**Interim Director**, Division of Disease Control and Health Protection, Florida Department of Health. 12/12-1/13 Coordinates the work of a new Division with +400 employees.

Administrator, the Epidemiology Capacity and Quality Control Section and Acting Administrator the Infectious Disease Prevention and Investigation Section, Bureau of Epidemiology, Florida Department of Health 07/12-12/12.

Oversees acute communicable disease investigations. Oversees the scientific activities of the Bureau of Epidemiology including work force development, preparedness functions, and quality improvement activities.

# **Chief, Bureau of Environmental Public Health Medicine**, Division of Environmental Health, Florida Department of Health 02/08-06/12

Responsibilities include oversight of 12 environmental epidemiology and toxicology programs in the Florida Department of Health. I consult on epidemiologic study design, serve as a team lead during epidemiology response activities, coordinate interagency zoonotic disease committees, represent the Department on state and national environmental epidemiology committees, work with community groups, mentor fellows, develop guidelines, and provide grant oversight. Guest lectures at universities and other agencies and organizations.

## State Public Health Veterinarian, Florida Department of Health 04/03-present

Provides oversight of policies that intersect with work done at animal health agencies. Serves as the Department's lead liaison with animal health agencies.

**Environmental Epidemiology Program Manager**, Division of Environmental Health, Florida Department of Health 03/03-02/08

Responsibilities include oversight of 3-8 environmental epidemiology programs. I consulted on disease surveillance and investigation issues, coordinated the Florida Rabies Advisory Committee

and the Florida Arbovirus Taskforce, the Department's avian influenza preparedness planning, represented the Department on state and national committees, mentored fellows, wrote and managed grants, provided training and presentations to stake holders in the state and nationally.

**Regional Epidemiologist**, Bureau of Epidemiology, Florida Department of Health. 06/98-03/03 Consulted with 21 county health departments on epidemiology issues, served as the back up to the State Public Health Veterinarian, performed outbreak investigations, provided training to stakeholders, served as the statewide human influenza surveillance coordinator and the Bureau's laboratory liaison. Developed epidemiology investigations and laboratory testing guidelines.

**Assistant Professor** in Biology, Valdosta State University, Valdosta, GA. (09/96- 06/98)

Post-Doctoral Research Associate, University of Notre Dame, Notre Dame IN (05/96-09/96).

**Small Animal Veterinarian** Karlstad Djursjukhus, Karlstad, Sweden (06/91-08/91)

**Relief Large Animal and Slaughterhouse Veterinarian** Jordbruksverket, Jönköping, Sweden (12/89-02-91)

### HONORS/AWARDS/ACTIVITIES

Scientific Consultant, CDC, Influenza Surveillance Program Evaluation, Kigali, Rwanda 2012.

**Adjunct Professor,** University of Florida, College of Public Health and Public Health Professions, 2010-present

Scientific Consultant, CDC, South East Asian One Health Training, Dhaka, Bangladesh 2010.

American Veterinary Epidemiology Society, Honorary Member, 2009

**Adjunct Professor,** University of Florida, College of Veterinary Medicine, 2004-present

Florida Public Health Leadership Institute, University of South Florida, 2002-2003

Davis Productivity Award WNV virus team, Florida Department of Health, 2001

Davis Productivity Award Anthrax team, Florida Department of Health, 2001

**Fellowship** John D. and Catherine T. MacArthur foundation (1995).

**NIH Predoctoral Training Grant Fellowship** (12/94-9/95).

#### **GRANTS**

**Enhanced Epidemiology and Laboratory Capacity grant,** Steering Committee member 2012-present \$2,5 million/year

**Pfisteria and other harmful algal blooms**, Principal Investigator, 2003-2009 \$800,000/ year **Hazardous Substances Emergency Events Surveillance**, Co-PI, 2006-2008, \$80,000/ year **Birth defects grant** Principal Investigator 2007-2008, \$250,000/ year

West Nile virus grant, Investigator, 2003-2011, \$250,000/ year

Asthma Prevention and Control, Principal Investigator, 2009-11 \$350,000/year

### RESEARCH INTERESTS

Epidemiology, pathogenesis, diagnostics and prevention of viral and other infectious and non-infectious diseases.

### **COUNCILS AND COMMITTEES**

NASPHV, President 2012-2013

CSTE Cancer Cluster Investigation Protocol Workgroup Co-Chair 2011

NASPHV, President-Elect 2010-2012

ASTHO representative to The One Health Joint Steering Committee, Communications Workgroup Chair 2008-2009

American Veterinary Medical Association's One Health Initiative Taskforce 2008

State Public Health Vector Control Conference 2003-present

Florida Coordinating Council on Mosquito Control 2003-present

Co-chair of the National Association of State Public Health Veterinarian's Animal Contact Compendium Committee 2005-2011.

CSTE representative on the ASTHO Mosquito Control Collaborative 2005, 2008

NASPHV representative on the National Interagency Highly Pathogenic H5N1 Wild Bird Avian Influenza Early Detection Working Group 2007.

NASPHV Avian Influenza Subcommittee Chair 2007-present

NASPHV Biosense Subcommittee Chair 2007-present

NASPHV representative to the AVMA Council for Public Health and Regulatory Medicine 2009

NASPHV representative to the AVMA Council on Food Safety 2009

Reviewer: Journal of Medical Entomology, Emerging Infectious Diseases, Journal of Vector Biology, Vectorborne and Zoonotic Diseases, Disaster Medicine

## **PUBLICATIONS**

Chiller TM, Roy M, Nguyen D, Guh A, Malani AN, Latham R, Peglow S, Kerkering T,

Kaufman D, McFadden J, Collins J, Kainer M, Duwve J, Trump D, **Blackmore C**, et. al., 2013. Clinical Findings of Fungal Infections Associated with Steroid Injections, US, 2012. NEJM 369(17):1610-9.

Rabinowitz PM, Kock R, Kachani M, Kunkel R, Thomas J, Gilbert J, Wallace R, **Blackmore C** et. al. 2013. Toward Proof of Concept of a "One Health" Approach to Disease Prediction and Control. 2013 EID 19 (12) Online report. <a href="http://wwwnc.cdc.gov/eid/article/19/12/13-0265\_article.htm">http://wwwnc.cdc.gov/eid/article/19/12/13-0265\_article.htm</a>

Selent M, Beau de Rochars VM, Stanek D, Bensyl D, Martin B, Cohen NJ, **Blackmore C** et. al. 2012. Malaria prevention knowledge, attitudes and practices (KAP) among international flying pilots and flight attendants of a US commercial airline. Journal of Travel Medicine. 19 (6): pp 366-372.

Stanbury M, Anderson H, **Blackmore C,** Fagliano J, Heumann M, Kass D, McGeehin M. 2012. Functions of environmental epidemiology and surveillance in state health departments. J. Public Health Manag. Pract. 18(5):453-460.

Radke EG, Gregory CJ, Kintziger KW, Sauber-Schatz EK, Hunsperger EA, Gallagher GR, Barber JM, Biggerstaff BJ, Stanek DR., Tomashek KM, **Blackmore** CG. 2012. Dengue outbreak in Key West, Florida, USA, 2009. Emerg. Infect. Dis. 18(1) 135-137.

**Blackmore C.** 2011. Zoonoses of Concern from Dogs. in Animals, Diseases and Human Health. Shaping our lives now and in the future. Radford G. Davis, ed. Pp 139-160. ABC-CLIO publishing company.

Kintzinger KW, Mulay P, Watkins S, Schauben J, Weisman R, Lewis-Younger C, **Blackmore C.** 2011. Wild mushroom exposures in Florida, 2003-2010. Public Health Reports. 126:844-852

Lo YC, Kintziger KW, Carson HJ, Patrick SL, Turabelidze G, Stanek D, **Blackmore C** et al. 2011. Severe Leptospirosis Similar to Pandemic (H1N1) 2009, Florida and Missouri, USA. Emerg Infect. Dis. 17(6):1145-6.

Harduar-Morano L, Simon M, Watkins S, **Blackmore C.** 2011. A population-based epidemiologic study of emergency department visits for anaphylaxis in Florida. J. Allergy and Clin. Immun. Online June 2011.

Onifade TJ, Hutchinson R, Van Zile K, Bodager D, Baker R, **Blackmore C**. 2011. Toxin producing Vibrio cholerae O75 outbreak, United States, March to April 2011. Euro Surveill 16(20):19870

Harduar-Morano L, Simon M, Watkins S, **Blackmore C.** 2010. Algorithm for the diagnosis of anaphylaxis and its validation using population-based data on emergency department visits for anaphylaxis in Florida. J. Allergy and Clin. Immun. 126(1) 98-104.

Weis' KE, Hammond' RM Hutchinson' R, **Blackmore CGM**. 2010. Vibrio illness in Florida, 1998-2007. Epidemiology and Infection. 14:1-8.

Stern EJ, Galloway R, Shadomy SV, Wannermuehler K, Atrubin D, **Blackmore C** et al. 2010. Outbreak of leptospirosis among adventure rave participants in Florida, 2005. CID 50:843-849.

**Blackmore** C, Rabinowitz PM, 2009. Influenza in Human-Animal Medicine: Clinical Approaches to zoonoses, toxicants and other shared health risks. Elsevier Publishing Company. Rabinowitz P and Conti L. (eds).

**Blackmore** C, 2009. West Nile virus in Human-Animal Medicine: Clinical Approaches to zoonoses, toxicants and other shared health risks. Elsevier Publishing Company. Rabinowitz P and Conti L. (eds).

King LJ, Andersson LR, **Blackmore CG** et al. 2008. Executive summary of the AVMA One Health Initiative Task Force report. JAVMA 233(2) 259-261.

Yabsley MJ, Murphy SM, Luttrell MP, Little SE, Massung RF, Stallknecht DE, Conti LA, **Blackmore CG**, Durden LA. 2008. Experimental and field studies on the suitability of raccoons (Procyon lotor) as hosts for tick-borne pathogens. Vector Borne Zoonotic Dis. 8(4):491-503.

Duprey Z., Rivers, S., Luber G, Becker A, **Blackmore C**, Barr D, Weerasekera G, Kieszak S, Flanders, W.D., Rubin C. 2008. Community Aerial Mosquito-Control and Naled Exposure. JAMCA. 24(1) 42-46.

**Blackmore C.G.M.**, Grimstad P.R.. 2008. Could <u>Sylvilagus floridanus</u> (the eastern cottontail rabbit) serve as an amplifying host for Cache Valley virus? J. Wildlife Dis. 44(1) 188-192.

Harduar-Morano L, Price J, Parker D, **Blackmore C**. 2008. PACE EH Post Project Assessment of Quality of Life Changes in a Florida Community Related to Infrastructure Improvements. JEH. 70:40-47.

Kay R.S., Vandevelde A.G., Fiorella P.D., Crouse R., **Blackmore C**, Sanderson R., Bailey C.L., Sands M.L. 2007. Outbreak of healthcare-associated infection and colonization with multidrugresistant Salmonella enterica serovar Senftenberg in Florida. Infect. Control Hosp. Epidemiol. 28(7):805-11.

Van Sickle D. Chertow DS, Schulte JM, Ferdinands JM, Patel PS, Johnson DR, Harduar-Morano L, **Blackmore C**, Ourso AC, Cruse KM, Dunn KH and RL Moolenaar. 2007. Carbon monoxide poisoning in Florida during the 2004 hurricane season. Am J Prev Med 2007; 32(4) 340-346.

Paddock CD, Nicholson WL, Bhatnagar J, Goldsmith CS, Greer PW, Hayes EB, Risko JA, Henderson C, **Blackmore CG**, Lanciotti RS, Campbell GL, Zaki SR. 2006. Fatal hemorrhagic fever caused by West Nile virus in the United States. CID 42 (11) 1527-35.

- Hellinger W.C., Hasan S.A., Bacalis L.P., Thornblom D.M., Beckmann S.C., **Blackmore C.,** Forster T.S., Tirey J.F., Ross M.J., Nilson C.D., Mamalis N, Crook J.E., Bendel R.E., Shetty Rajesh, Stewart M.W., Bolling J.P., Edelhauser H.F. 2006. Outbreak of Toxic Anterior Segment Syndrome Following Cataract Surgery Associated With Impurities of Autoclave Steam Moisture. Infection Control Hosp. Epidemiol.: 27 (3) 294-298.
- Godsey M.S., Blackmore M.S., Panella N.A., Burkhalter K, Gottfried K, Halsey L.A, Rutledge R, Langevin S.A., Gates R, Lamonte K.M., Lambert A, Lanciotti R.S., **Blackmore C.G.M.**, Loyless T, Stark L, Oliveri R, Conti L, Komar N. 2005 West Nile virus epizootiology in the southeastern United States, 2001. Vectorborne and Zoonotic Diseases: (1) 82-89.
- **Blackmore C. G. M.**, Stark L.M., Jeter W.C., Oliveri R.L., Brooks R.G., Conti L.A., Wiersma S.T. 2003. Surveillance Results From West Nile Virus First Transmission Season in Florida, 2001. AJTMH: 69 (2): 141-150.
- Iwamoto, M., Jernigan, D.B., Guasch A., Trepka M., **Blackmore C.G.M.**, Hellinger W.C. et al. 2003. Transmission of West Nile Virus from an Organ Donor to Four Transplant Recipients. NEJM: 348:2196-2203.
- Krause G., **Blackmore C.**, Wiersma S, Lesneski C., Gauch, L., and Hopkins, R.S. 2002. Mass vaccination campaign in response to a community outbreak of meningococcal disease. EID: 8 (12) 1398-403.
- Krause G., **Blackmore C.**, Wiersma S., Lesneski C., Woods C.W., Rosenstein, N.E. and Hopkins, R.S. 2001. Marijuana Use and Social Networks in a Community Outbreak of Meningococcal Disease. .Southern Medical Journal: 94(5) pp 482-485.
- Spalding M.G., Frederick P.C., McGill H.S., Bouton S.N., Richey L.J., Schumacher I, **Blackmore C.G.M.**, Harrison J. 2000. Histologic, neurologic and immunologic effects of methylmercury in captive great egrets. J. Wildl. Dis: 36(3) 423-435.
- **Blackmore, C.G.M.**, Grimstad, P.R.. 1998. Cache Valley and Potosi viruses (<u>Bunyaviridae</u>) in white-tailed deer (<u>Odocoileus virginianus</u>): experimental infections and prevalence in natural populations. J. Am. Trop. Med. Hyg. 59(5): 704-709.
- **Blackmore C.G.M.**, Blackmore M.S., Grimstad P.R.. 1998. The role of <u>Anopheles quadrimaculatus</u> and <u>Coquillettidia perturbans</u> in the transmission cycle of Cache Valley virus in the Midwest. J. Med.Entomol. 35: 660-664.
- **Blackmore C.G.M.** 1997. The seroprevalence of Eastern Equine Encephalomyelitis in Michigan Swine. Vector Control Bulletin of the North Central States: 5(1) pp. 6-9.
- Steen M., **Blackmore C.G.M.** and Skorping A. 1997. <u>Elaphostrongylus alces</u> and <u>Elaphostrongylus rangiferi</u> (Nematoda, Protostrongylidae): Experimental cross infections of reciprocal hosts, reindeer (<u>Rangifer tarandus</u>) and moose (<u>Alces alces</u>), with special emphasis on prepatent period and parasite morphology. Veterinary Parasitology 71(1) 27-38.

**Blackmore C.G.M.** 1996. Cache Valley virus cycles in the Midwest. Vector Control Bulletin of the North Central States: 5(1) pp 5-8.

**Blackmore C.G.M.** 1995. Cache Valley virus in the Midwest. Vector Control Bulletin of the North Central States: 4(1) pp 12-15.

Steen M. and **Johansson C.** 1990. Elaphostrongylus spp. from Scandinavian Cervidae- a scanning electron microscopy study (SEM). Rangifer 10(1): 39-46.

Cavicchia, P.P., Watkins S, **Blackmore** C et. al. 2013. Eye injuries sustained at a foam party-Collier County, Florida 2012. MMWR 62(33);667-668.

Adams V, Anderson H. **Blackmore C** et. al. 2013. Public Health Response to Suspected Community Cancer Clusters: Guidelines from CDC and the Council of State and Territorial Epidemiologists. MMWR 62 (RR08); 1-24.

Atrubin D, Wansbrough L, Cruse K, Stanek D, **Blackmore C**. 2012. Caterpillar-associated rashes in children-Hillsborough County, Florida 2011. MMWR 61(12);209-211.

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Dunn JR, Cochair; Smith KE, CoChair; C Blackmore, L. Castrodale, Ron Wohrle, James H. Wright, DVM. 2011. Compendium of measures to prevent disease associated with animals in public settings, 2011. MMWR 60 (RR04);1-24.

Stanek D, **Blackmore C** et al. 2010. Notes from the field: Malaria imported from West Africa by flight crews-Florida and Pennsylvania, 2010. MMWR 59(43); 1412.

Trout A, Baracco G, Rodriguez M, Barber J, Leal A, Radke E, Weis K, Stanek D, Stark L, **Blackmore C** et al. 2010. Locally Acquired dengue, Key West, Florida 2009-2010. MMWR. 59(19):577-581.

**Blackmore C**, Cochair; Dunn JR, CoChair; L. Castrodale, K. Smith, Ron Wohrle, James H. Wright, DVM. 2009. Compendium of measures to prevent disease associated with animals in public settings, 2009. MMWR 58 (RR05);1-21.

D. Giurgiutiu, C Banis, H Hunt, J Mincer, C Nicolardi, A Weltman, D Stanek, S Matthews, C Siegenthaler, **C Blackmore** et al. 2009. *Brucella suis* infection associated with feral swine hunting – three states, 2007-2008. MMWR 58(22); 618-621.

E O'Connell, MPH, J Suarez, F Leguen, MD, G Zhang, MD, M Etienne, A Torrecilla, A Jimenez, MPH, F Farahi, MPH, M Alzugaray, D Rodriguez, MPH, S Pizano, DVM, C Blackmore DVM,

PhD, et al. 2007. Outbreak of Cutaneeous Larva Migrans at a Children's Camp - Miami, Florida, 2006. MMWR 56(49); 1285-1287.

**Blackmore** C, Cochair; Bender, JR, CoChair; Kirk Smith,; John Dunn, James H. Wright, 2007. Compendium of measures to prevent disease associated with animals in public settings, 2007. MMWR 56 (RR05);1-19.

RS Kay, MPH, RS Hopkins, MD, C Blackmore, DVM, PhD, et.al. 2006. Monitoring Poison Control Center Data to Detect Health Hazards During Hurricane Season, Florida, 2003-2005. MMWR 55(15) 426-428.

KM McNeill, MD, PhD, P Byers, MD, T Kittle, MPH, S Hand, J Parham, MD, L Mena, MD, C **Blackmore**, DVM, PhD et. al. 2006. Surveillance for illness and injury after hurricane Katrina-Three counties, Mississippi, September 5-October 11, 2005. MMWR 55(09): 231-234.

M Davies, MD, J Engel, MD, D Griffin, D Ginzl, MPH, R Hopkins, MD, C Blackmore, DVM, et al. 2005. Outbreaks of Escherichia coli o157:H7 associated with petting zoos-North Carolina, Florida and Arizona 2004 and 2005. MMWR 54(50): 1277-1280.

Millicent Eidson, DVM, Cochair; Jeffrey B. Bender, DVM, CoChair; Carina Blackmore, DVM, PhD; James J. Kazmierczak, DVM, James H. Wright, DVM. 2005. Compendium of measures to prevent disease associated with animals in public settings, 2005. MMWR 54(RR04);1-12.

T Blankenship, MD, A John, Broward County Health Dept, Fort Lauderdale; C Blackmore, DVM et al. 2005. Human rabies-Florida, 2004, 2005. MMWR 54(31);767-769.

JC Sniffen, DO, TW Cooper, MD, Florida Hospital, Orlando; D Johnson, MD, C Blackmore, DVM et. Al. 2005. Carbon monoxide poisoning from hurricane-associated use of portable generators, Florida, 2004. MMWR 54(28);697-700.

KT Jones, Office of Vital Statistics, Jacksonville; M Grigg, Office of Planning, Evaluation & Data Analysis; LK Crockett, MD, Div of Disease Control; L Conti, DVM, Div of Environmental Health; **C Blackmore**, DVM et al. 2004. Preliminary medical examiner reports of mortality associated with hurricane Charley, Florida, 2004.MMWR 53(36); 835-837.

JM Malecki, MD, S Kumar, MD, BF Johnson, ML Gidley, TE O'Connor, J Petenbrink, Palm Beach County Health Dept; L Bush, MD, J Morand, MT Perez, MD, JFK Hospital, Palm Beach County; S Pillai, PhD, L Crockett, MD, C Blackmore, DVM et al. 2003. Local transmission of Plasmodium vivax malaria-Palm Beach County, Florida, 2003. MMWR 52(38); 908-911.

C Selover, C Thacker, M Hill, MPH, Okeechobee County Health Dept, Okeeechobee; F Lugo, MPH, Palm Beach County Health Dept, West Palm Beach; M Lo, MPH, M Pawlowicz, PhD, J Schulte, DO, C Blackmore, DVM, et. al. 2003. Multifocal autochthnous transmission of malaria-Florida, 2003. MMWR 53(19); 412-413.

L Shireley, MPH, K Kruger, T Miller, MPH, D Johnson, MS, North Dakota Dept of Health. S

Lance-Parker, DVM, R Ratard, MD, M Currier, MD, MG Stobierski, DVM, L Scott, D Johnson, MD, G Stoltman, PhD, S Wiersma, MD, M Trepka, MD, C Blackmore, PhD et.al. 2002. Update: Investigations of West Nile virus infections in Recipients of organ transplantations and blood transfusions: MMWR: 51(37);833-836.