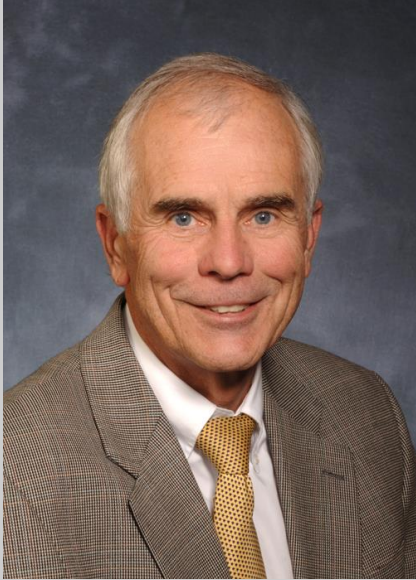




Edward B. Breitschwerdt



Professor of Medicine and  
Infectious Diseases

BS University of Maryland,  
College Park, MD

DVM University of Georgia,  
College of Veterinary  
Medicine, Athens, GA

**Address:**

North Carolina State University  
College of Veterinary Medicine  
1060 William Moore Drive  
Raleigh, NC 27607

**Phone:** 919-513-8277

**Email:**

ed\_breitschwerdt@ncsu.edu  
VBDDL lab  
cvm\_ticklab@ncsu..edu

<https://cvm.ncsu.edu/research/labs/clinical-sciences/vector-borne-disease/>

### Naturally occurring vector-borne disease

**Research emphasis:** Historically, our research has focused on tick-transmitted pathogens in the genera *Babesia*, *Anaplasma*, *Ehrlichia* and *Rickettsia*. Current studies include the genus *Bartonella*. *Bartonella* are critically important emerging pathogens in One Health Medicine. Recently, we have lead efforts to enhance the diagnostic detection of these highly fastidious pathogens in animal and human patient samples. Our approaches range from serological and molecular assays to enrichment culture platforms and genetic characterization that has led to the detection of novel pathogens in naturally occurring disease.

#### Selected publications:

Lantos PM, Maggi RG, Ferguson B, VarkeyJ, Park LP, Breitschwerdt EB, Woods CW. Detection of *Bartonella* species in the blood of veterinarians and veterinary technicians: A newly recognized occupational hazard. *Vector Borne Zoonotic Dis* 14:563-570; 2014.

Maggi RG, BR Mozayeni, EL Pultorak, BC Hegarty, JM Bradley, M Correa, EB Breitschwerdt: *Bartonella* spp.bacteremia and rheumatic symptoms in patients from Lyme disease-endemic region. *Emerg Infect Dis* 18:783-91, 2012.

Pultorak EL, Maggi RG, Breitschwerdt EB. Bartonellosis: A One Health Perspective. In: *Confronting EmergingZoonoses: A One Health Perspective*. Springer, pp 113-137; 2014.

Breitschwerdt EB. Bartonellosis: One health perspectives for an emerging infectious disease. *ILAR Journal* (Institute for Laboratory Animal Research, National Academy of Sciences) 55:46-58, 2014.

#### Application:

- Infectious disease detection
- Novel pathogen detection
- Diagnoses of vector borne disease

#### Collaboration potential:

- Epidemiologic studies in vector-borne diseases (VBD)
- Pathogenesis of naturally occurring VBD.
- Wildlife medicine and health
- Zoonotic potentials of VBD