



Case #700

## Highly Specific and Neutralizing Therapeutic Antibodies for Zika Virus

Zika virus, a member of the *Flaviviridae* virus family, is a single stranded positive sense RNA virus that is spread by *Aedes* mosquitoes. While it was previously contained to regions of Africa and Asia along a narrow equatorial belt, it has recently spread to areas of the Americas. In adults, Zika virus infection can lead to Guillain-Barre syndrome and fetuses *in utero* are especially susceptible to Zika virus infections, causing thousands of birth defects and miscarriages.

Researchers at UVM and UNC have identified two highly specific and neutralizing antibodies isolated from a traveler naïve to all serotypes of Dangué. The antibodies (A9E and G9E) can be used against 7 different Zika virus types and react only to Zika virus and no other flaviviruses.

### Applications:

- Diagnosis and treatment of Zika virus infection.
- Antibody sequences for vaccine development.

### Advantages:

- Non-reactive to Dangué and other flaviviruses.
- Fully characterized binding site.
- More potent and highly specific than currently available Ziki antibodies.

### Intellectual Property and Development Status:

PCT Application PCT/US2018/062233

Ready for research and development collaboration and licensing.

### Inventors:

Sean Diehl  
Aravinda de Silva  
Matthew Collins  
Ben McElvany

### Contact Information:

Kerry Elizabeth Swift  
Technology Licensing Officer  
[Kerry.Swift@med.uvm.edu](mailto:Kerry.Swift@med.uvm.edu)  
802-656-8780