



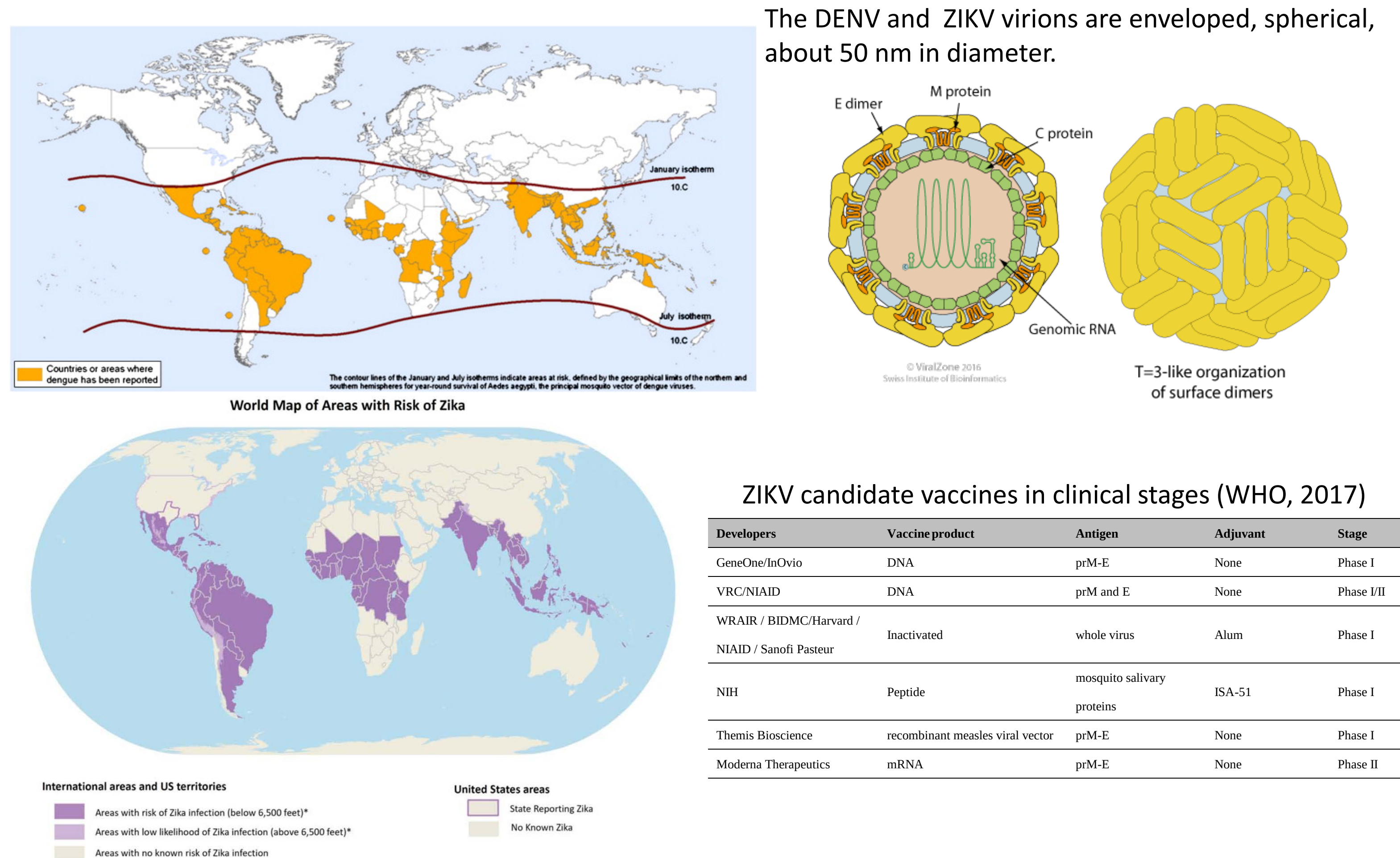
Development of Vaccines against Emerging Viral Infections

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Dengue and Zika Vaccine Research

Review of Dengue and Zika Virus Infections

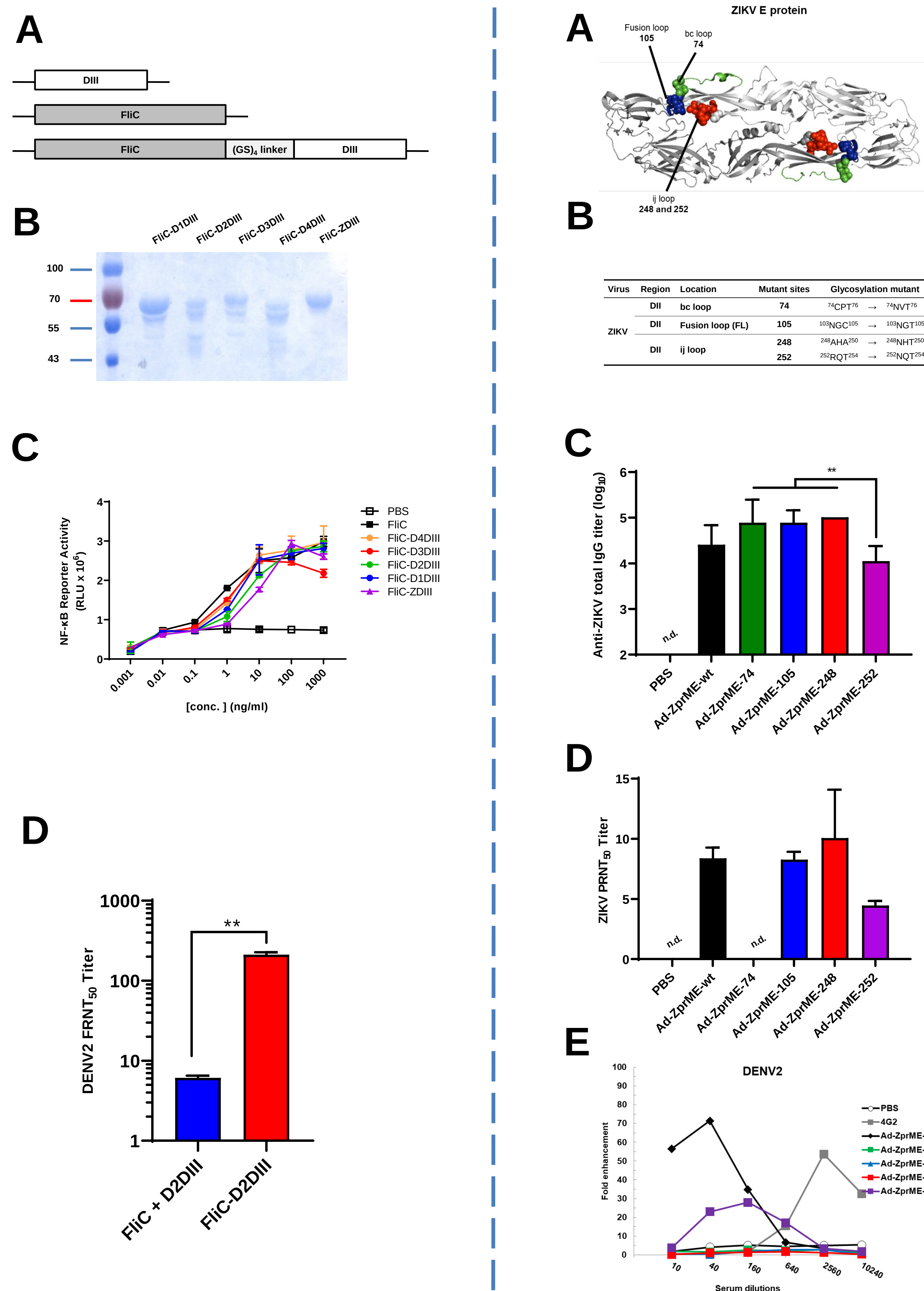
Fig. 1



Murrell S, Wu SC*, Butler M. Review of dengue virus and the development of a vaccine. **Biotechnol Adv.** 2011; 29(2):239-47.

Lin HH, Yip BS, Huang LM, Wu SC*. Zika virus structural biology and progress in vaccine development. *Biotechnol Adv.* 2017 Sep 12. pii: S0734-9750(17)30115-5.

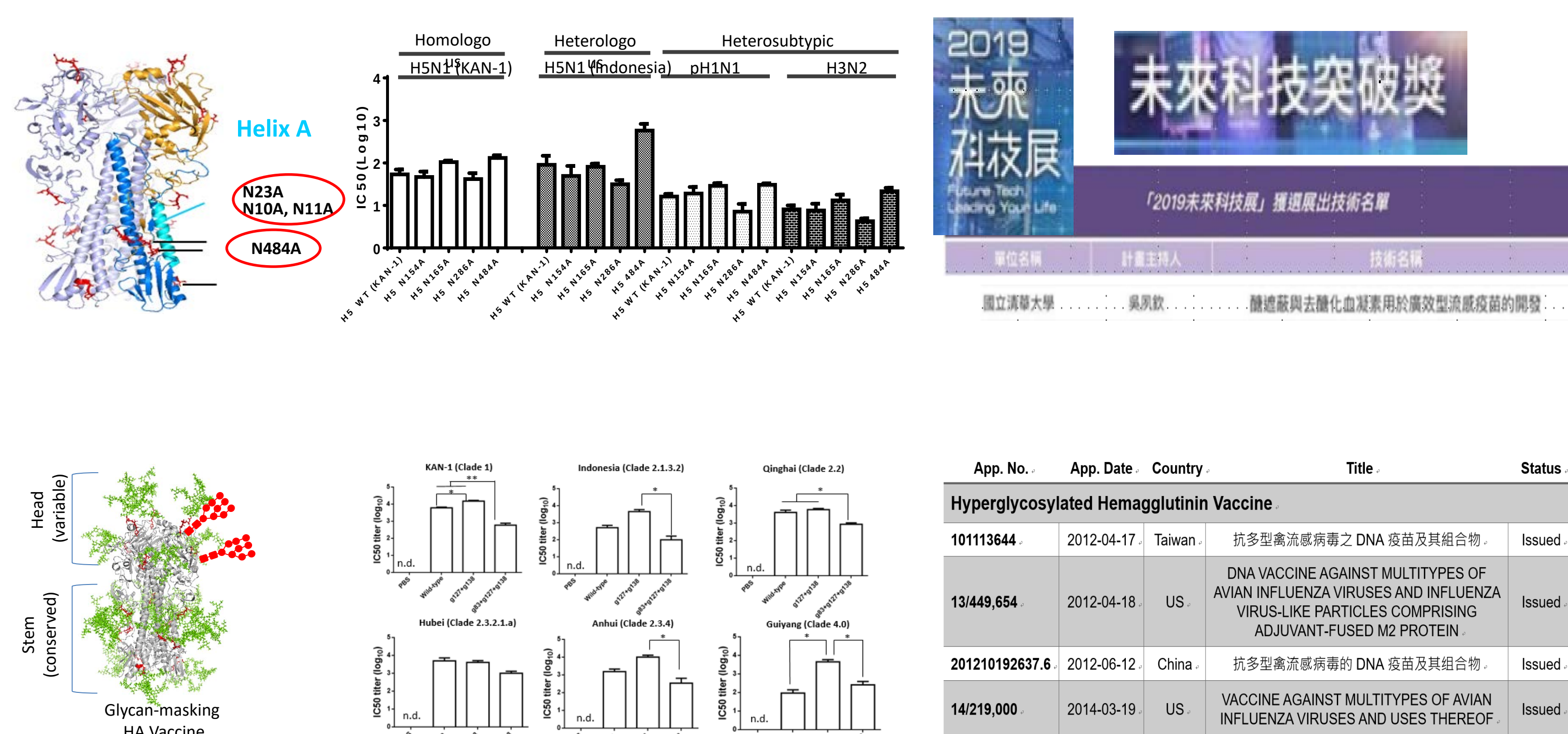
Dengue and Zika virus domain III-flagellin fusion and glycan-masking E antigen for prime-boost vaccine design



Lin HH, Yang SP, Tsai MJ, Lin GC, Wu HC, **Wu SC***. Dengue and Zika Virus Domain III-Flagellin Fusion and Glycan-Masking E Antigen for Prime-Boost Immunization. **Theranostics**. 2019 Jul 9;9(16):4811-4826.

Human and Avian Influenza Vaccine Research

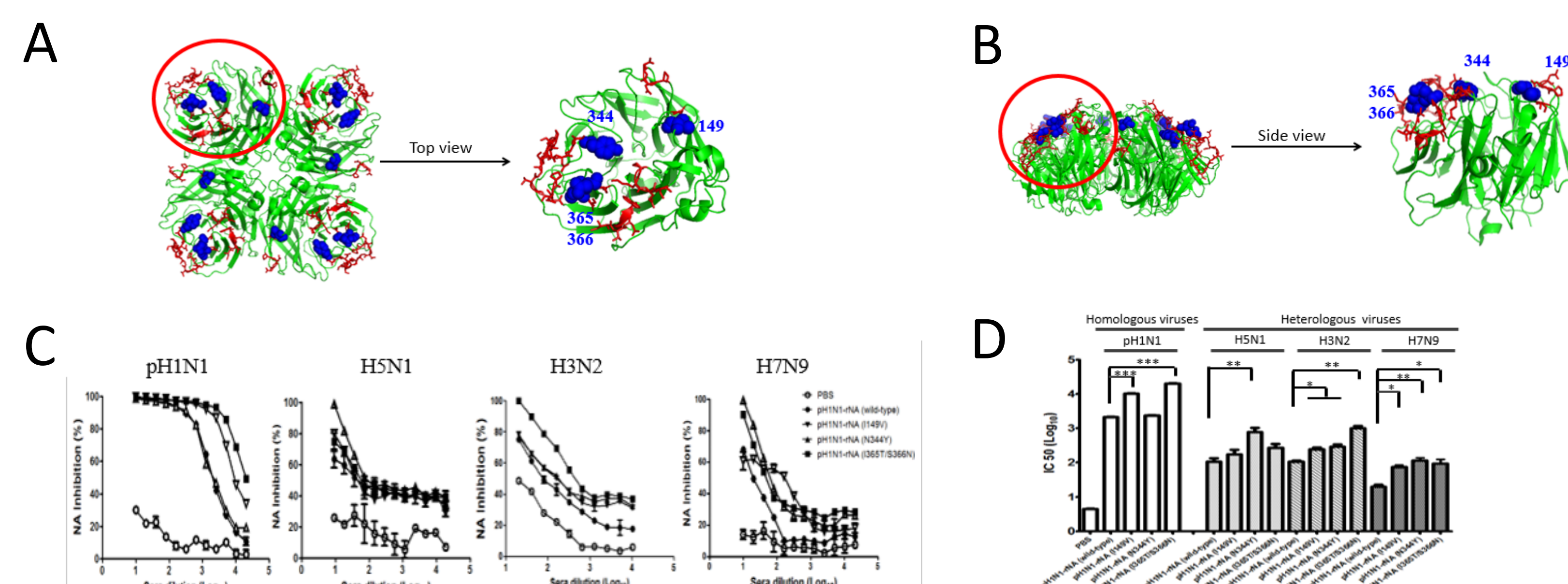
Glycan-unmasking and glycan-masking hemagglutinin designs for broadly protective influenza vaccine development



Liu WC, Jan JT, Huang YJ, Chen TH, **Wu SC***. Unmasking Stem-Specific Neutralizing Epitopes by Abolishing N-Linked Glycosylation Sites of Influenza Virus Hemagglutinin Proteins for Vaccine Design. *J Virol*. 2016 Sep 12;90(19):8496-508.

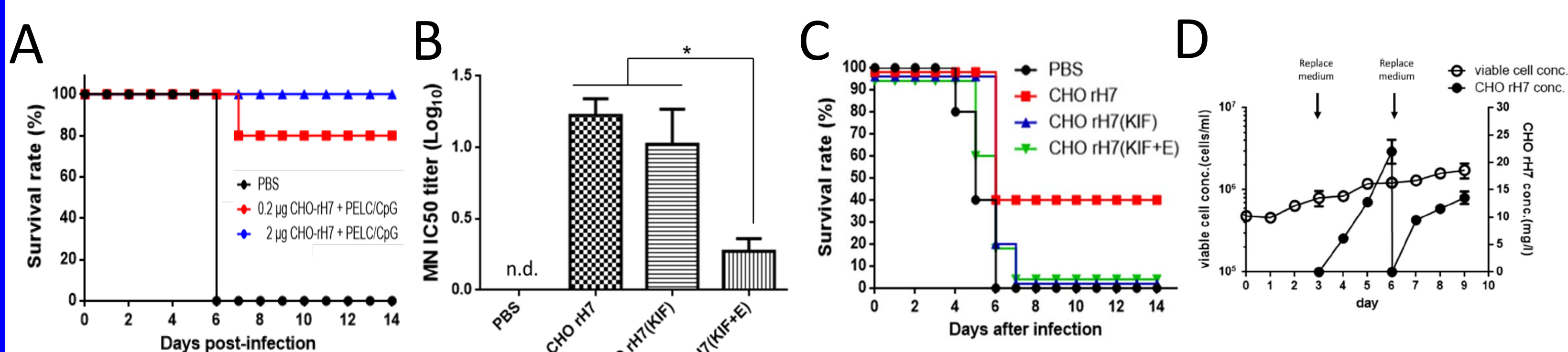
Chen TH, Liu WC, Lin CY, Liu CC, Jan JT, Spearman M, Butler M, **Wu SC***. Glycan-masking hemagglutinin antigens from stable CHO cell clones for H5N1 avian influenza vaccine development. *Biotechnol Bioeng*. 2019 Mar;116(3):598-609. doi: 10.1002/bit.26810

Cross-Reactive influenza vaccine designed by Recombinant Neuraminidase Proteins



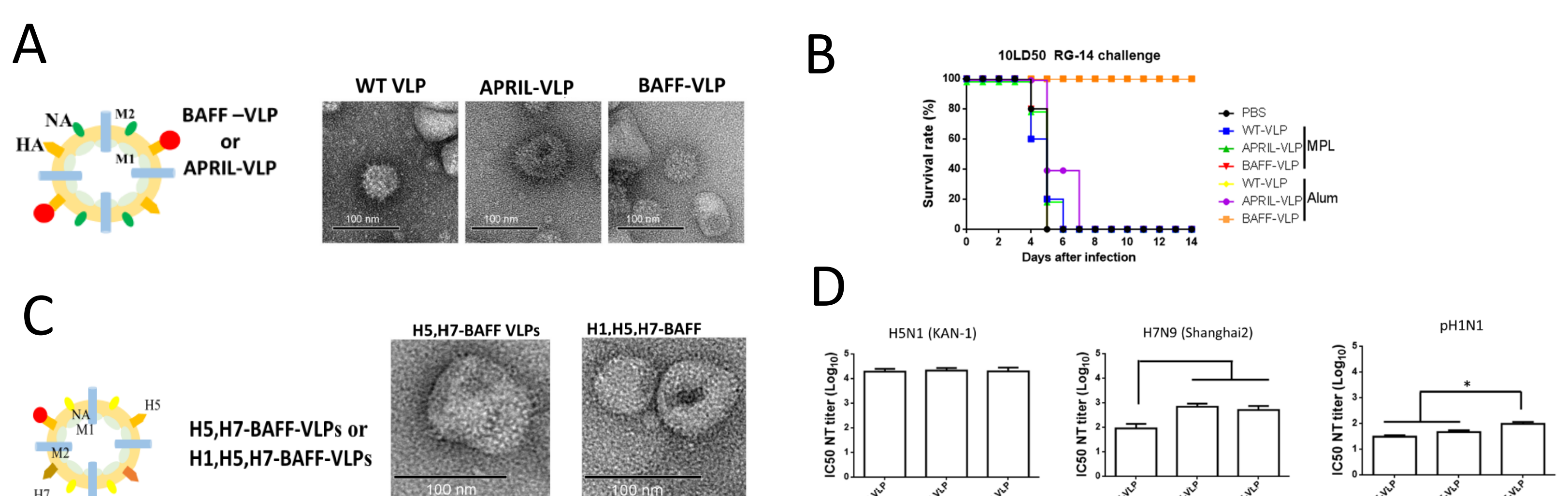
Liu WC, Lin CY, Tsou YT, Jan JT, **Wu SC***. Cross-Reactive Neuraminidase-Inhibiting Antibodies Elicited by Immunization with Recombinant Neuraminidase Proteins of H5N1 and Pandemic H1N1 Influenza A Viruses. *J Virol*. 2015 Jul;89(14):7224-34.

CHO cell stable clone technology for H7N9 vaccine development



Chen TH, Liu WC, Chen IC, Liu CC, Hang MH, Jan JT, **JW SC***. Recombinant hemagglutinin produced from Chinese Hamster Ovary (CHO) stable cell clones and a PELC/CpG combination adjuvant for H7N9 subunit vaccine development. *Vaccine*. 2019 Aug 2. pii: S0264-410X(19)30247-6. doi: 10.1016/j.vaccine.2019.07.061.

Fabrication of VLPs for Vaccine Design



Hong JY, Chen TH, Chen YJ, Liu CC, Jan JT, **Wu SC***. Highly immunogenic influenza virus-like particles containing B-cell-activating factor (BAFF) for universal influenza A virus subunit vaccine development. **Antiviral Res.** 2019 Apr;164:12-22. doi: 10.1016/j.antiviral.2019.03.011.