

### The Native Antigen Company Limited



### **Company History:**

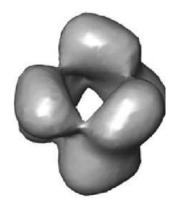


- Started as Hybrid Systems in 2001
- Hived off as NAC 2010
- Labs in Cherwell Innovation Centre
- 11 employees
- ISO 9001 accredited



#### **Business Foundation**

"To satisfy a key gap in serology (IVD) testing & clinical research for antigens which represent the native state to deliver a true representation of an in vivo infection in an in vitro setting"



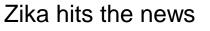
(Image Courtesy of Gutsche *et al.,* PNAS <u>108</u> (19), 8003 – 8008)

Dengue Virus NS1, launched 2013



## Zika Case Study

- Summer 2015: Started Zika NS1 project (mammalian expression)
- November 2015: Product launched
- December 2015: Zika





- January 2016: 30+ individual orders for Zika NS1
- February 2016: Stardom
- Started several projects:
  - non-crossreacting mAbs to Zika NS1
  - Zika IgM/IgG ELISA
  - Zika VLPs (prM/E)
  - Zika LFD

**NativeAntigen** 



Dr NICK ROESEN Chief Scientific Officer, The Native Antigen Co. B|B|C SOUTH TODAY

## **Core Competencies**





**NativeAntigen** 

- Native organism growth (virus/bacteria up to BSL 2)
- Native protein purification
- DNA design and cloning
- Vector and gene optimisation
- Recombinant protein expression in human cells
- Protein purification research and optimisation
- Transfection studies
- Ultracentrifugation
- Contract freeze drying / freeze drying optimisation
- Production of standards and controls
- ELISA and LFD feasibility



The Native Antigen Company Key points



- DNA -> protein -> antibody -> ELISA/LFD
- Fast and flexible SME
- Infectious disease focus
- Bridge the gap between Academia and Industry



# **Current Products**



Viral Antigens



Bacterial Antigens & Toxins

- Adenovirus
- Astrovirus
- Cytomegalovirus
- Dengue
- HSV1 and 2
- JEV
- TBEV
- Usutu
- West Nile
- Yellow Fever
- Zika
- NativeAntigen



- Chlamydia
- C. difficile toxin
- C. diphtheriae toxin
- Mycoplasma pneumoniae
- N. gonorrhoeae



- Toxoplasma gondii
- Trichomonas vaginalis