



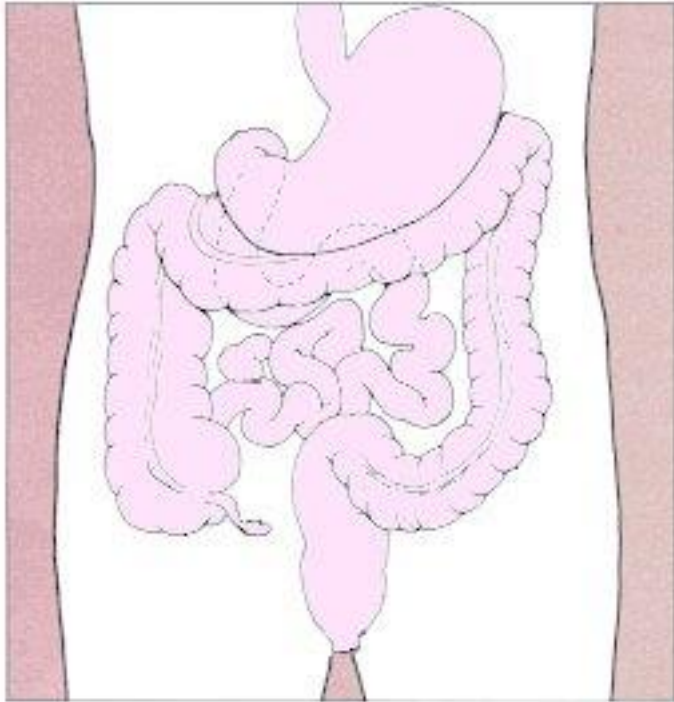
Southampton Centre for
Biomedical Research

Bacterial Therapy for future non-antibiotic treatment and prevention of infectious disease

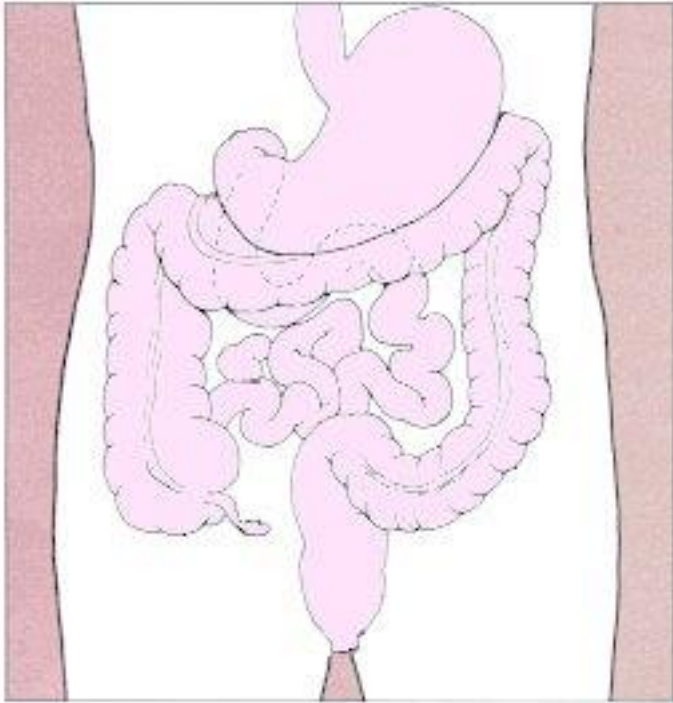
Robert Read

Infectious Diseases

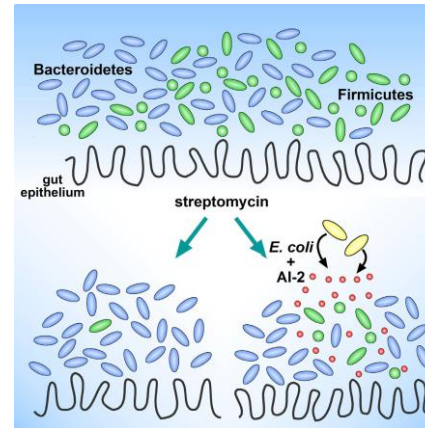
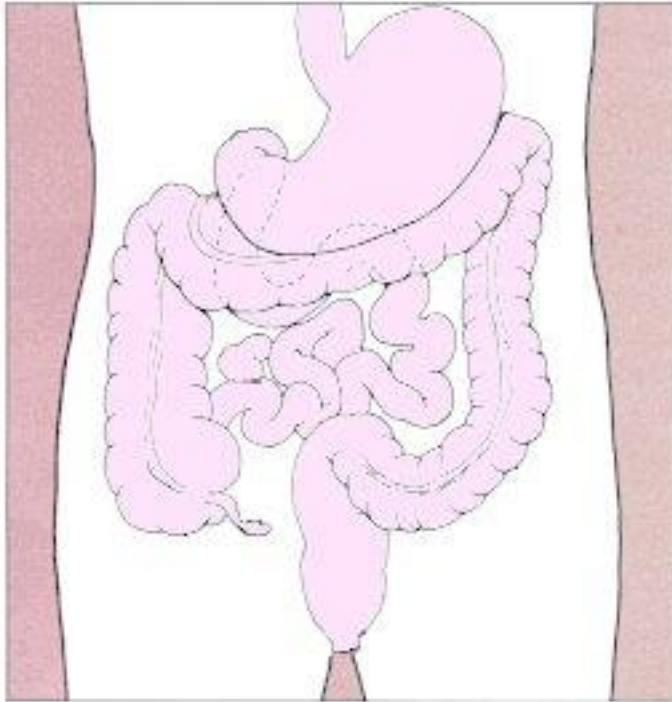
Bacterial Therapy



Bacterial Therapy



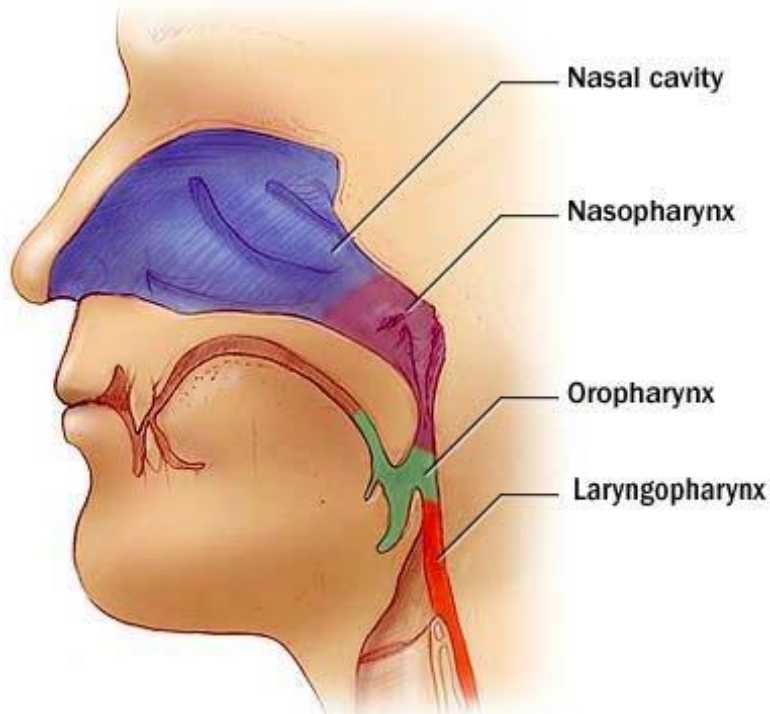
Bacterial Therapy



Manipulation of the
Quorum Sensing Signal
AI-2
Affects the Antibiotic-
Treated Gut Microbiota

Thomson JA et al;
Cell Reports; 2015

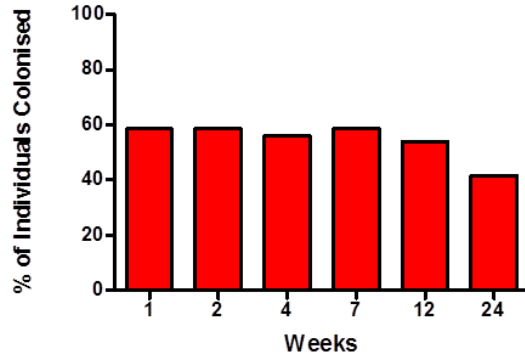
The nasopharynx...the root of all.....



- Pneumonia
- Otitis Media
- Sinusitis
- Chronic Bronchial Sepsis
- Meningitis

Neisseria lactamica and natural immunity

% of Individuals Colonised with *N. lactamica*
Following Live Intranasal Challenge (n=41)



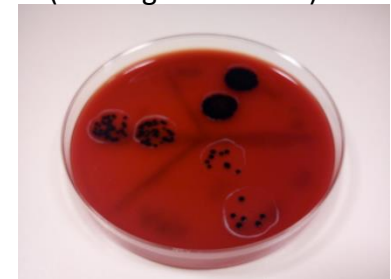
Challenged, n=41, Control (PBS) n=20

Evans C et al CID 2011



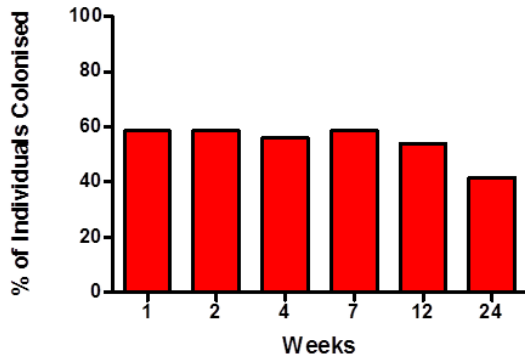
Y92 1009

(Gorringe et al 2009)

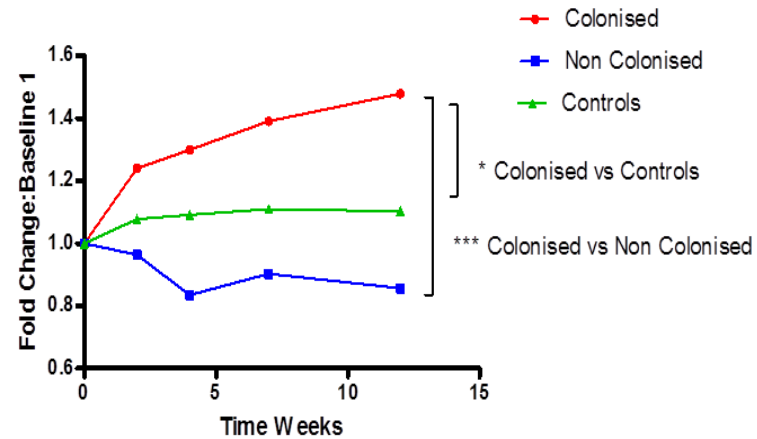


Neisseria lactamica and natural immunity

% of Individuals Colonised with *N. lactamica*
Following Live Intranasal Challenge (n=41)

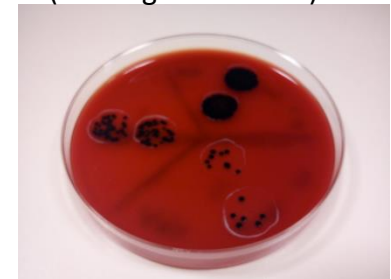


Mean Fold Rise Data of Salivary IgA following
Live Challenge with *N. lactamica*



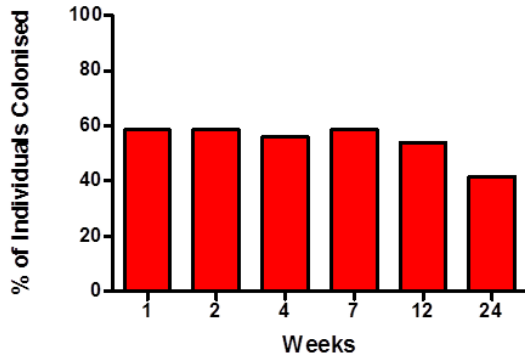
Y92 1009

(Gorringe et al 2009)

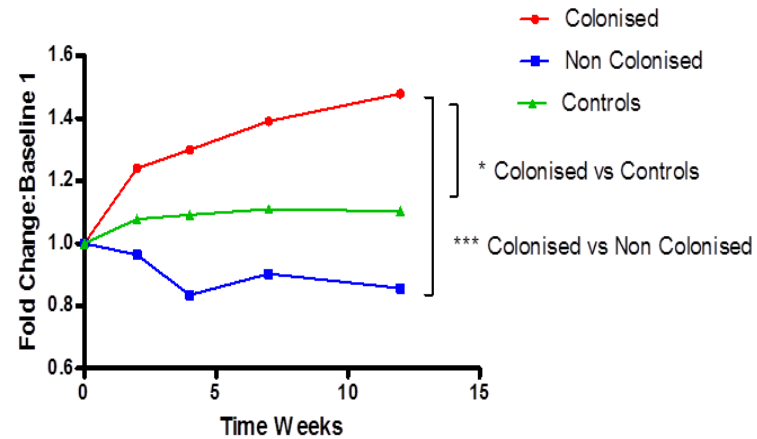


Neisseria lactamica and natural immunity

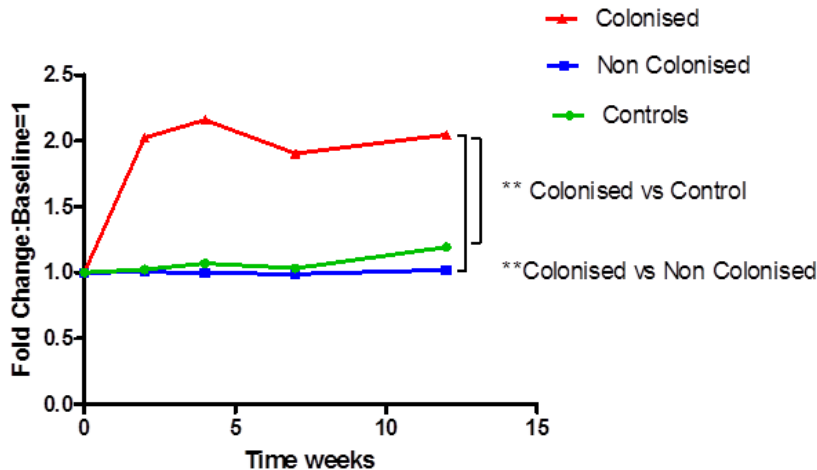
% of Individuals Colonised with *N. lactamica*
Following Live Intranasal Challenge (n=41)



Mean Fold Rise Data of Salivary IgA following
Live Challenge with *N. lactamica*



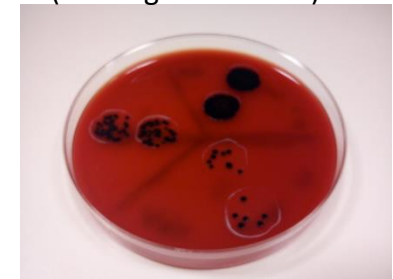
Mean Fold Rise of Total Serum IgG following
Live Challenge with *N. lactamica*



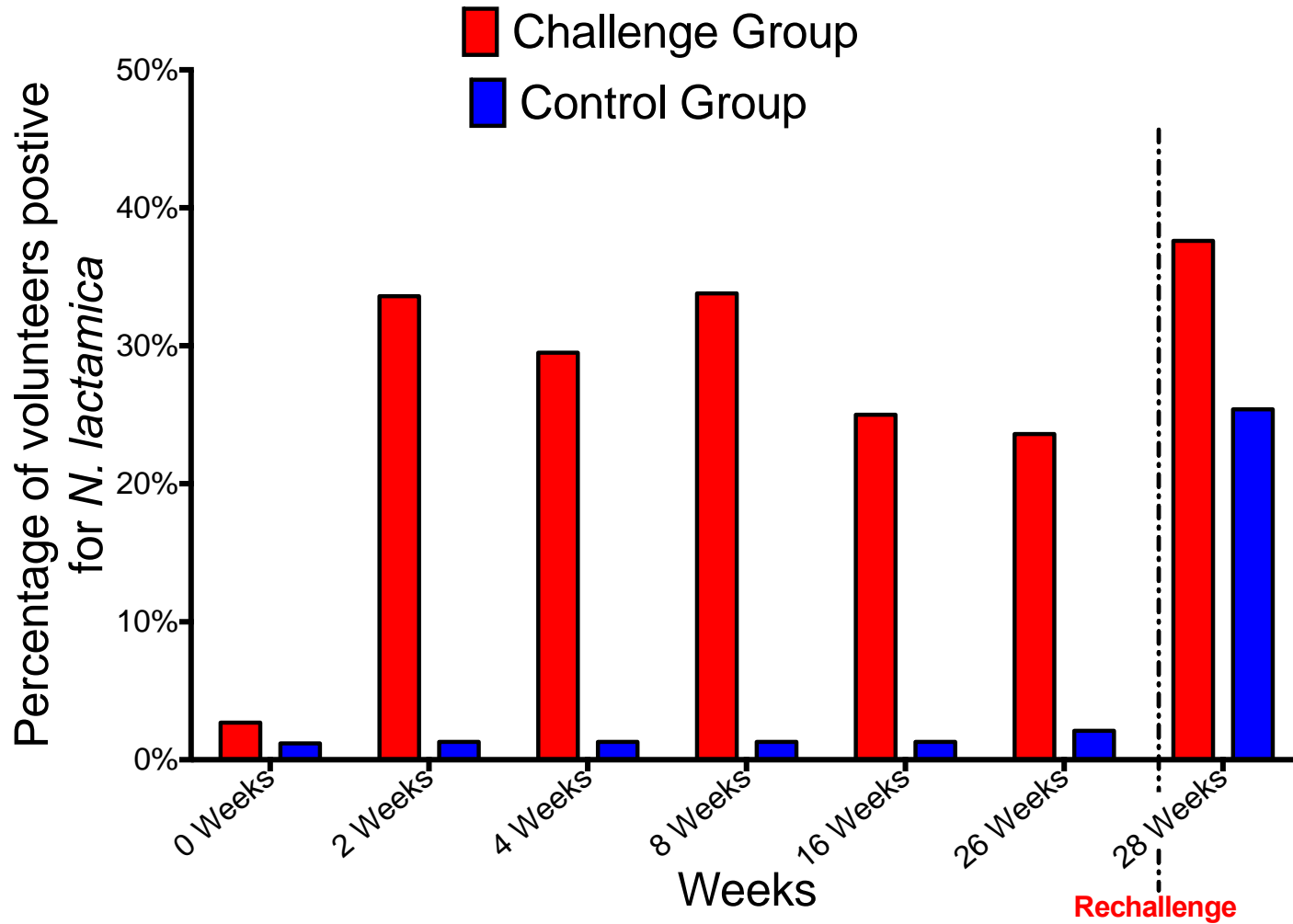
Evans C et al CID 2011

Y92 1009

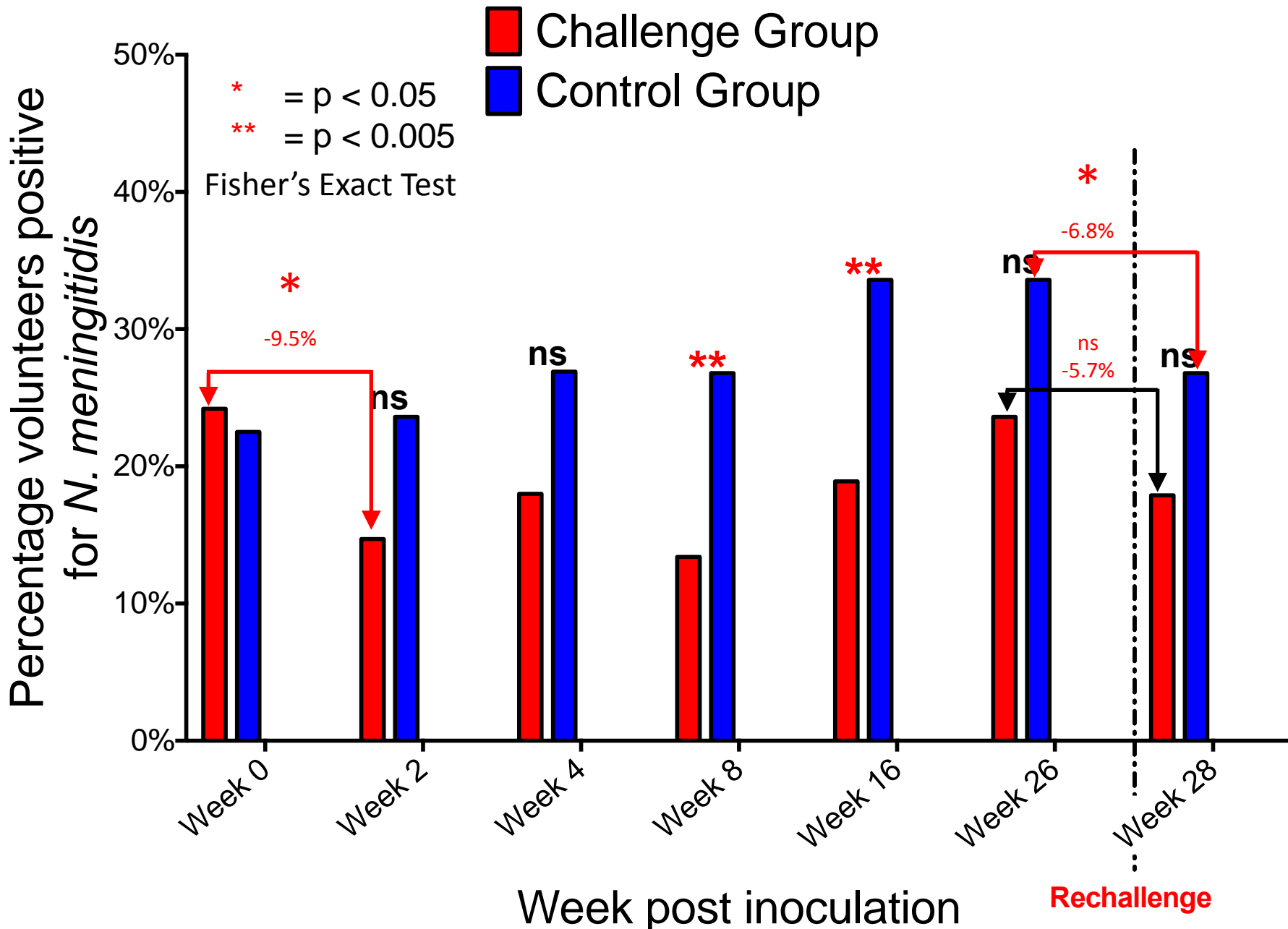
(Gorringe et al 2009)



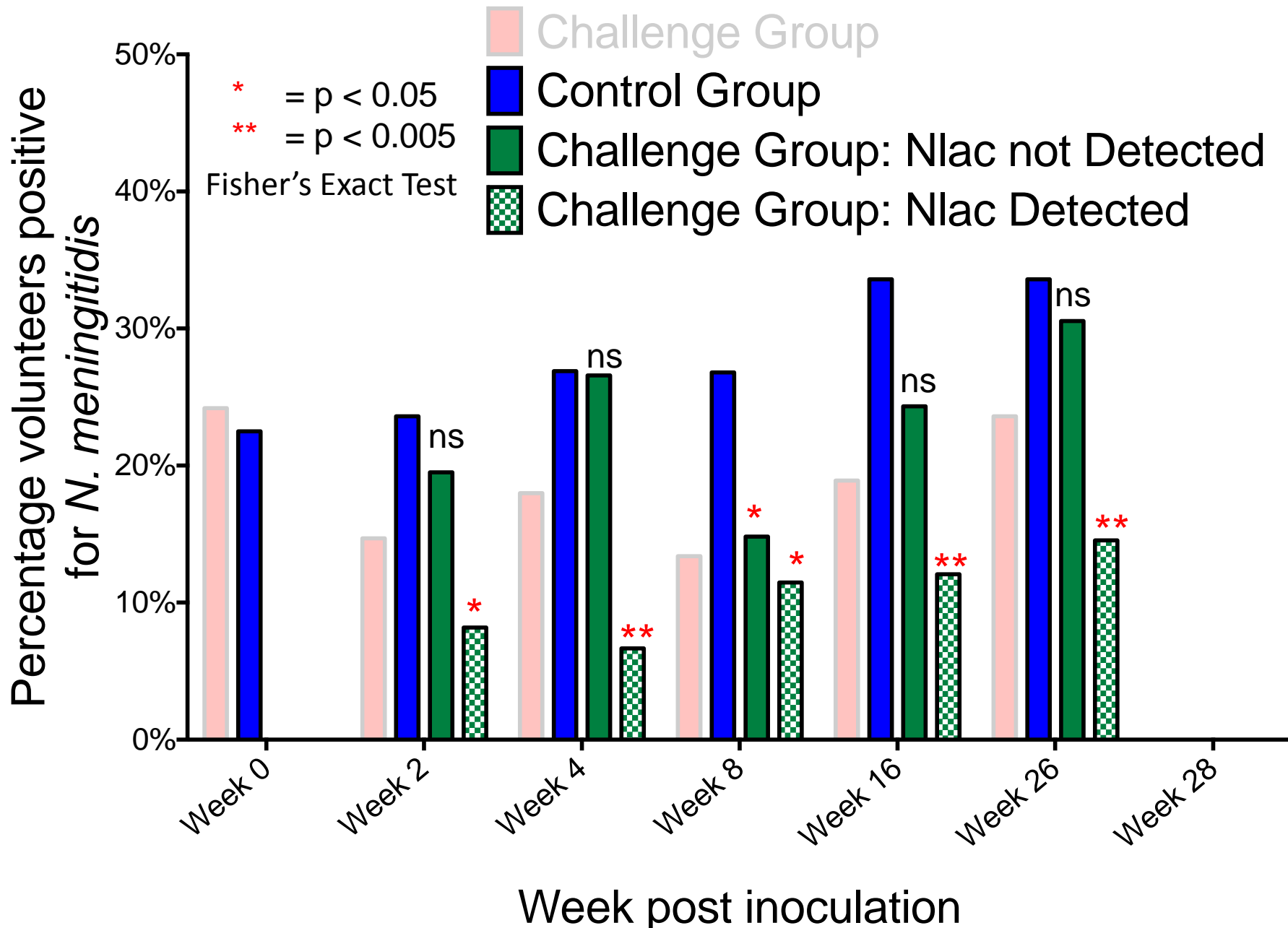
N. lactamica carriage

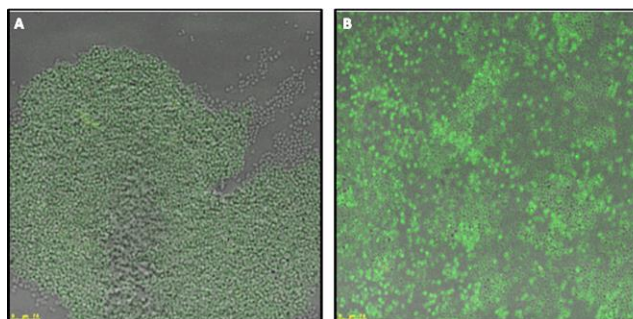
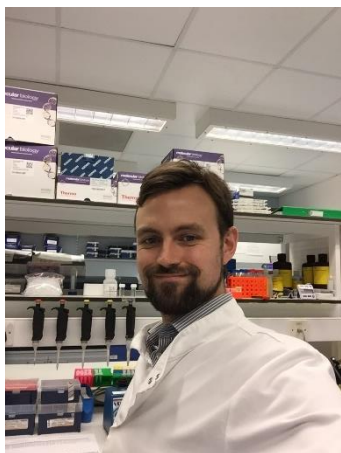
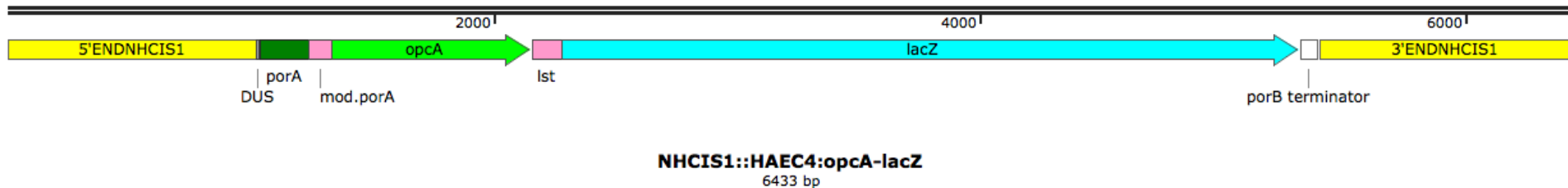
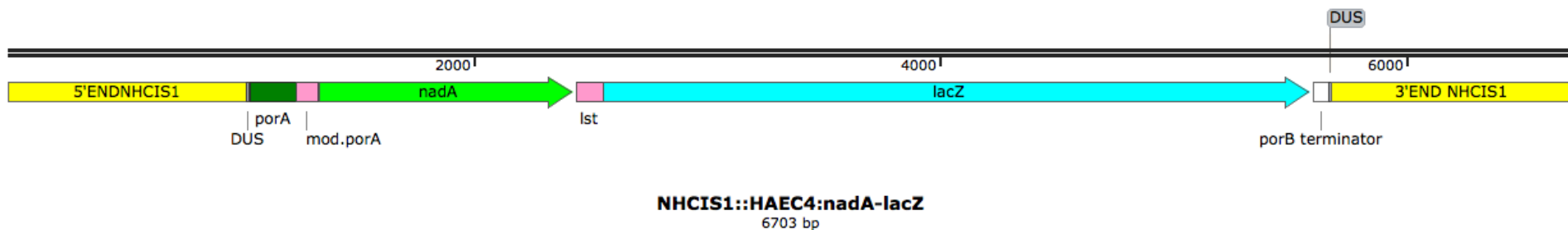


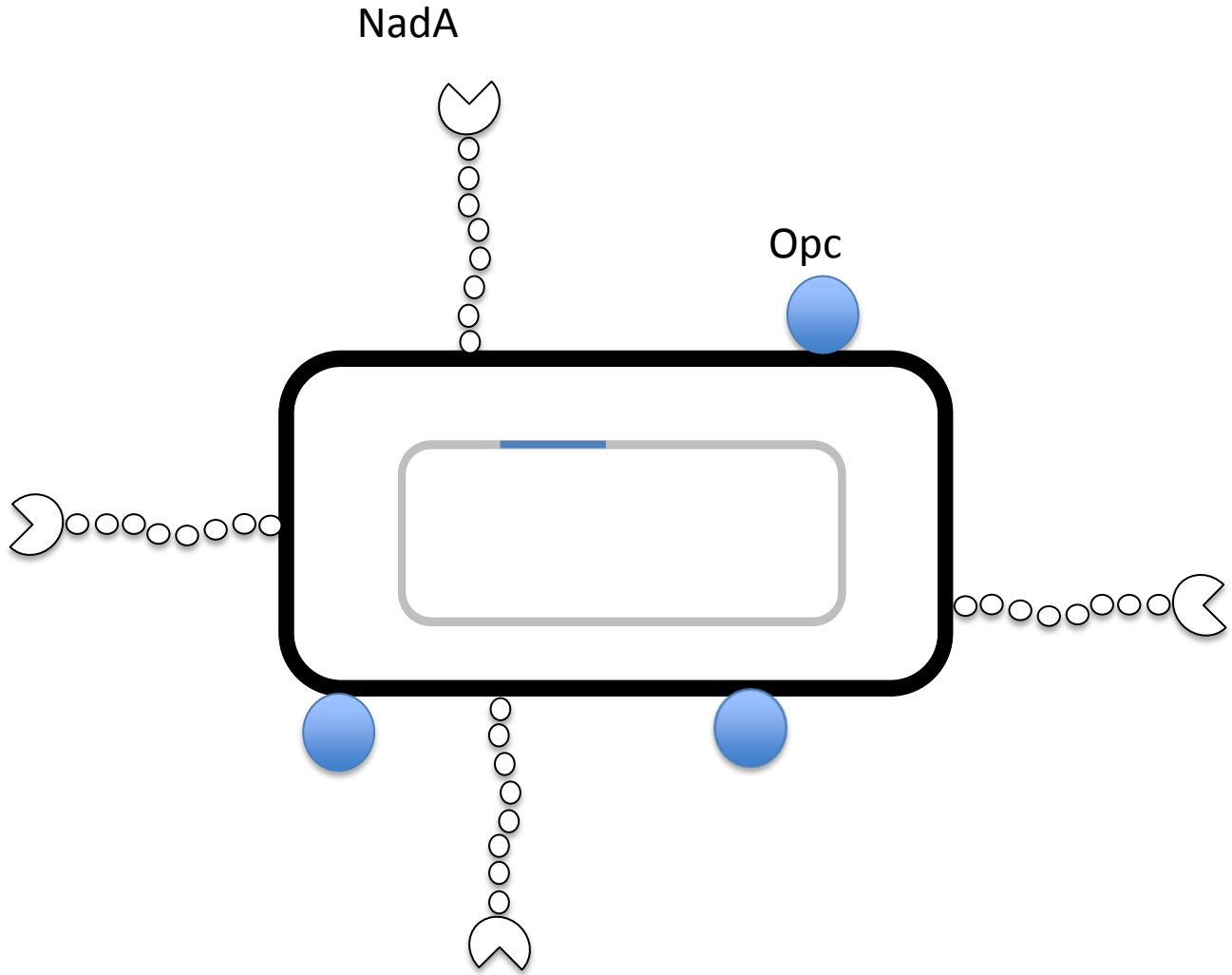
N. meningitidis carriage

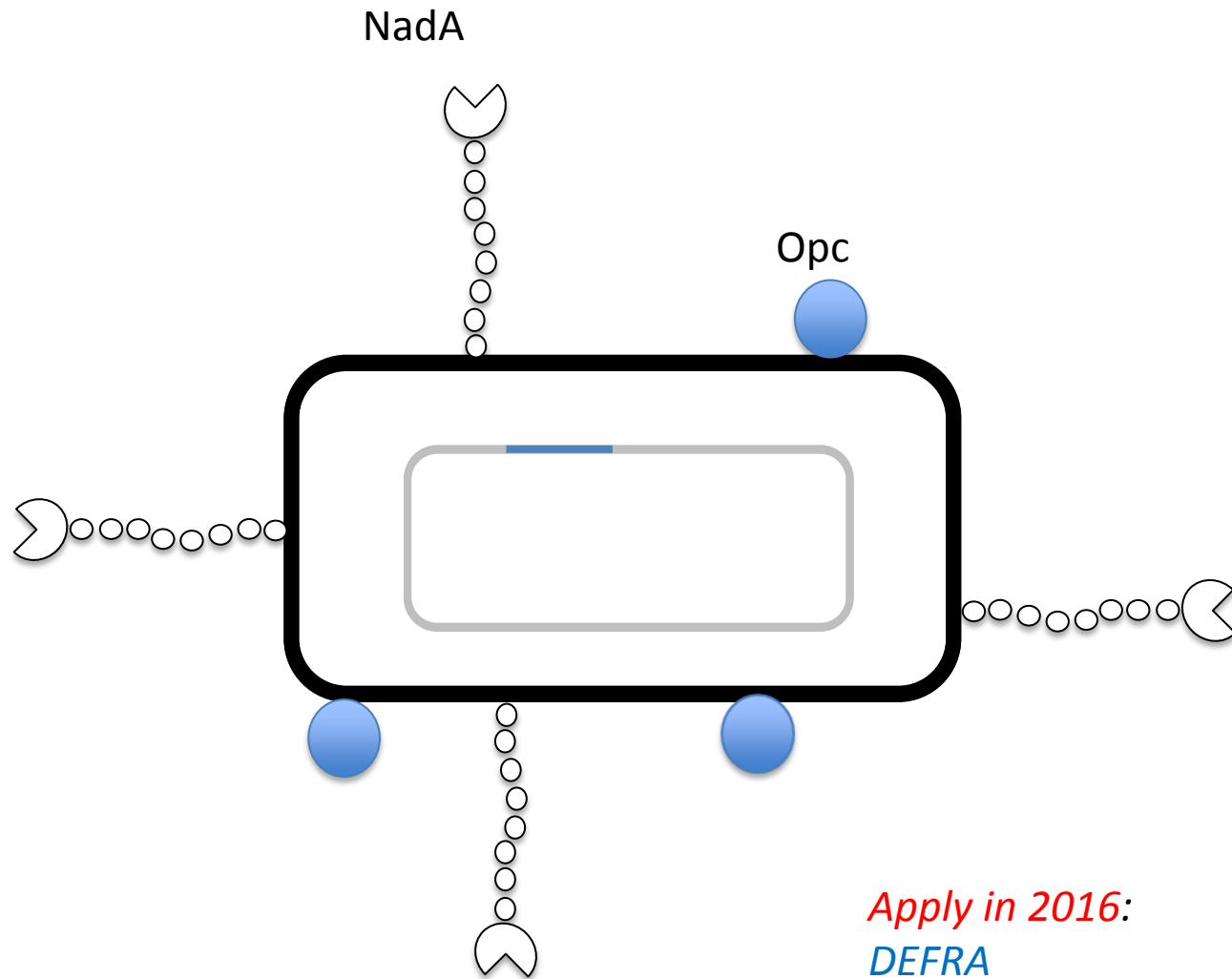


N. meningitidis carriage









Apply in 2016:
DEFRA
NRES



Southampton Centre for
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