PHILOSOPHICAL TRANSACTIONS B

Contents

Discussion meeting issue: Biological challenges to effective vaccines in the developing world

INTRODUCTION
Biological challenges to effective vaccines in the developing world
NC Grassly, G Kang and B Kampmann

ARTICLES
Searching for the human genetic factors standing in the way of universally effective vaccines
AJ Mentzer, D O’Connor, AJ Pollard and AVS Hill

Genomics of immune response to typhoid and cholera vaccines
PP Majumder

The impact of maternal infection with Mycobacterium tuberculosis on the infant response to bacille Calmette–Guerin immunization
PA Mawa, G Nkurunungi, M Egesa, EL Webb, SG Smith, R Kizindo, M Akello, SA Lule, M Muwanga, HM Dockrell, S Cose and AM Elliott

Malnutrition and vaccination in developing countries
AJ Prendergast

Is infant immunization by breastfeeding possible?
V Verhasselt

Exploring the role of environmental enteropathy in malnutrition, infant development and oral vaccine response
AA Gilmartin and WA Petri Jr

Potential for use of retinoic acid as an oral vaccine adjuvant
M Mwanza-Lisulo and P Kelly

Probiotics, antibiotics and the immune responses to vaccines
I Praharaj, SM John, R Bandyopadhyay and G Kang

Vaccinology in the era of high-throughput biology
HI Nakaya and B Pulendran

Systems vaccinology: a promise for the young and the poor
N Amenyogbe, O Levy and TR Kollmann

Factors influencing innate immunity and vaccine responses in infancy
B Kampmann and CE Jones

Can immunological principles and cross-disciplinary science illuminate the path to vaccines for HIV and other global health challenges?
CB Wilson and CL Karp

Vaccines against enteric infections for the developing world
C Czerninsky and J Holmgren

Delivering vaccines to the people who need them most
MA Barocchi and R Rappuoli

CORRECTIONS
Correction to ‘Brown spider monkeys (Ateles hybridus): a model for differentiating the role of social networks and physical contact on parasite transmission dynamics’
R Rimbach, D Bisanzio, N Galvis, A Link, A Di Fiore and TR Gillespie