

Un vaccin universel contre tous les flavivirus ?

Julien Pompon

THE NATION THAILAND

Delhi Reports 5 Fresh Dengue Cases in a Week, Tally Rises to 74

THE STRAITS TIMES

SINGAPORE

Over 700 dengue cases reported in S'pore in one week, highest since 2020



IN-FOCUS

Thailand due to be hit by dangerous Dengue-2 outbreak at Songkran

Outbreak News Today

BREAKING Plague in DRC: 56 cases reported in 2022 to date, Most in Lokpa

Outbreak News Radio Interviews Drugs and antibiotics Vaccines Research Blogs

TRENDING US News Latin America and the Caribbean Animal diseases

Home » **Headlines** » Brazil reports a 35% increase in dengue cases in first two months of 2022

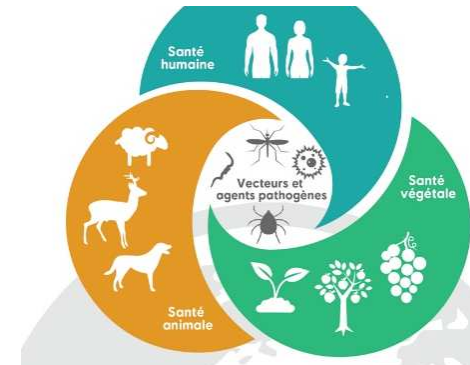
Brazil reports a 35% increase in dengue cases in first two months of 2022

by NEWS DESK

March 23, 2022 [Headlines, Latin America and the Caribbean](#) [No Comments](#)

Zika and dengue among viruses that could spark the 'next pandemic'

Experts are scrambling to develop strategies to stop next outbreak escalating into a catastrophe. Targeting arboviruses is top of the list



Qui je suis ?

2010. PhD en physiologie de l'insecte



2014-2019. Chef d'équipe sur la transmission des arbovirus



2019: Chef équipe sur la transmission des arbovirus



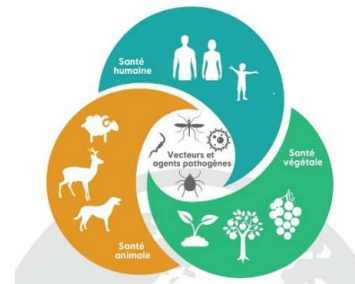
2010-2014. Entomologie moléculaire



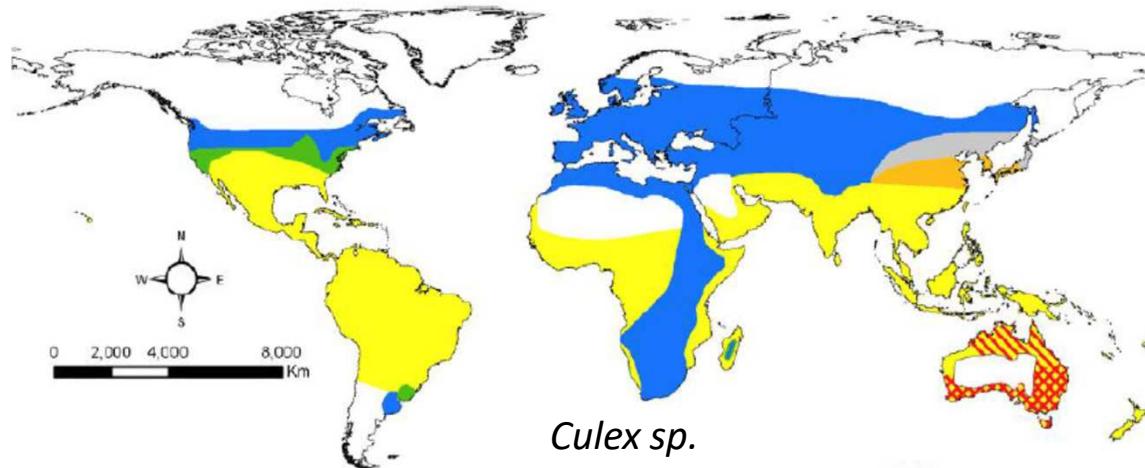
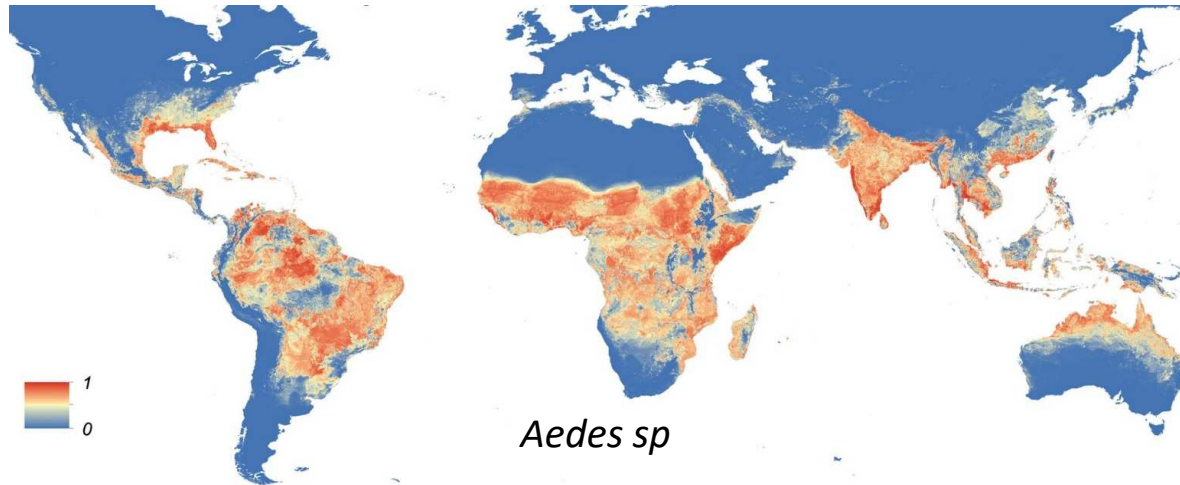
Objectif : Identifier des cibles moléculaires pour développer de nouveaux outils de lutte



Journée valorisation
28 avril 2022



La quasi-totalité de la population est à risque !



Dengue: 390 million cas / an

Zika: 1.5 million cas depuis 2015

Fièvre jaune: 130 000 cas / an

Fièvre du Nil Occidental: 50 000 cas / an

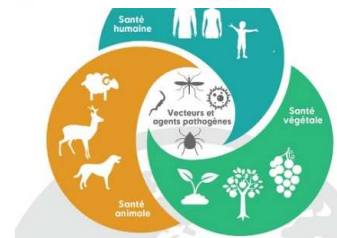
Encephalite Japonaise: 70 000 cas / an

...

**250 000 morts par an
> 10 milliards US\$ / an**

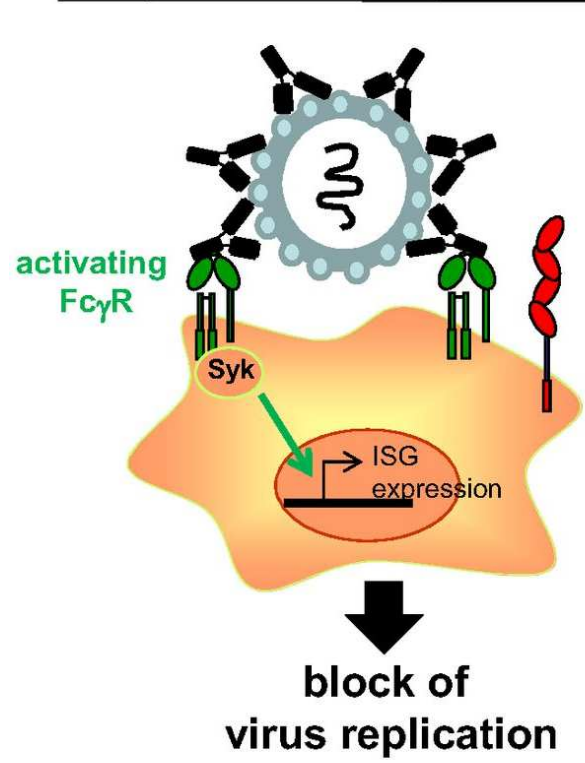


Pas de traitement efficace !

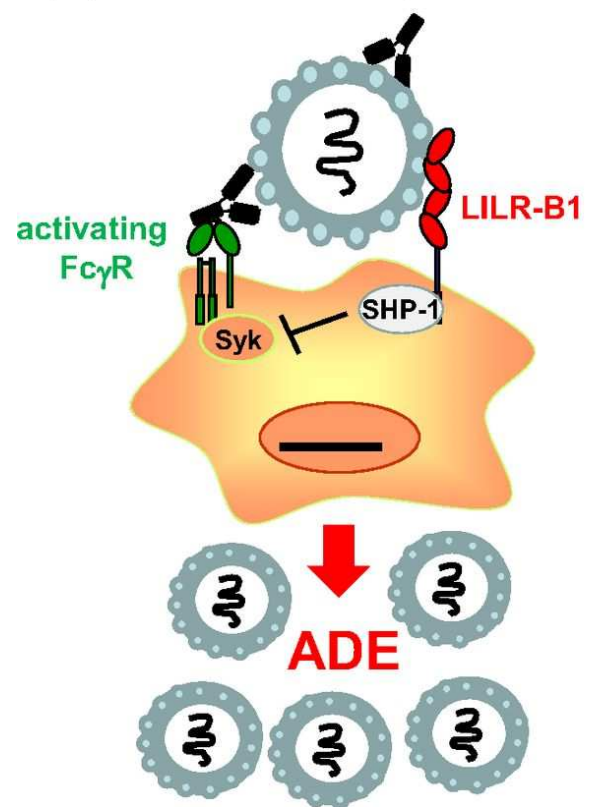


Vaccin ciblant un seul virus sont dangereux !

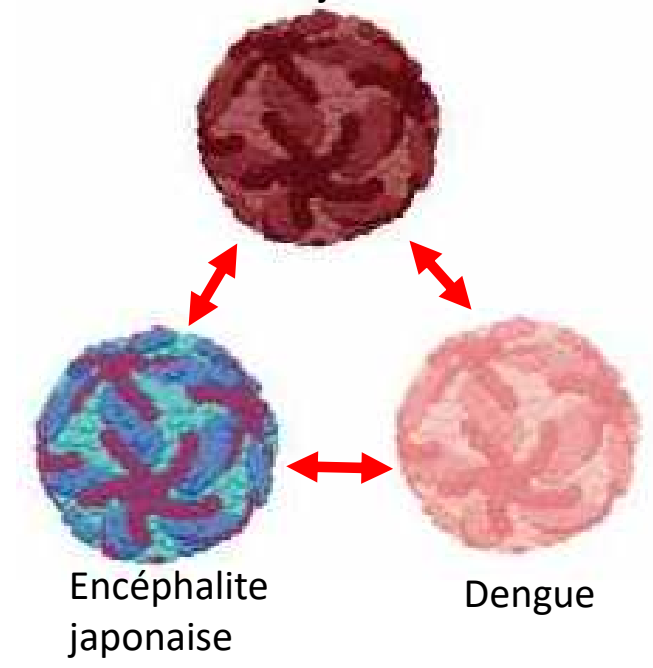
High anti-DENV IgG



Subneutralizing anti-DENV IgG



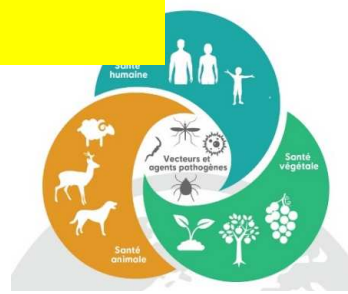
Fièvre jaune



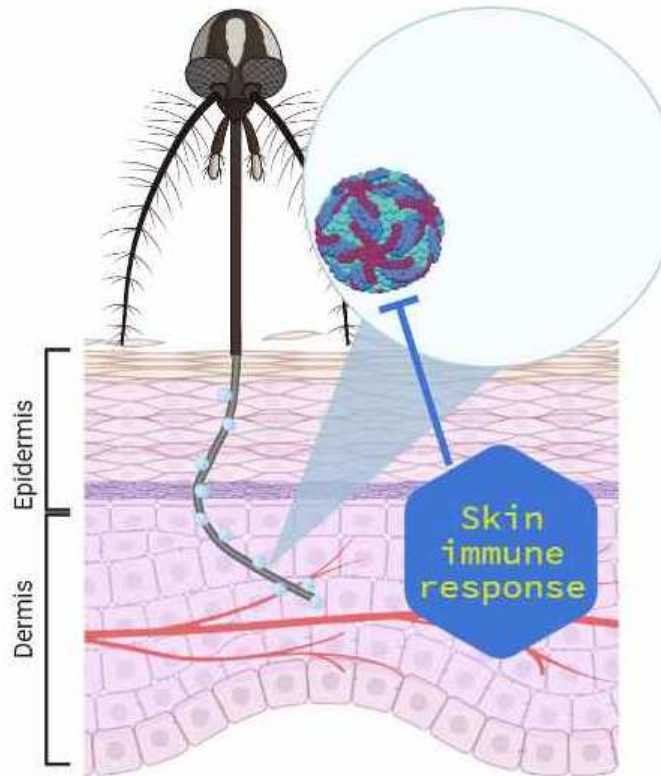
Aggravation des symptômes par la vaccination



Journée valorisation 28 avril 2022



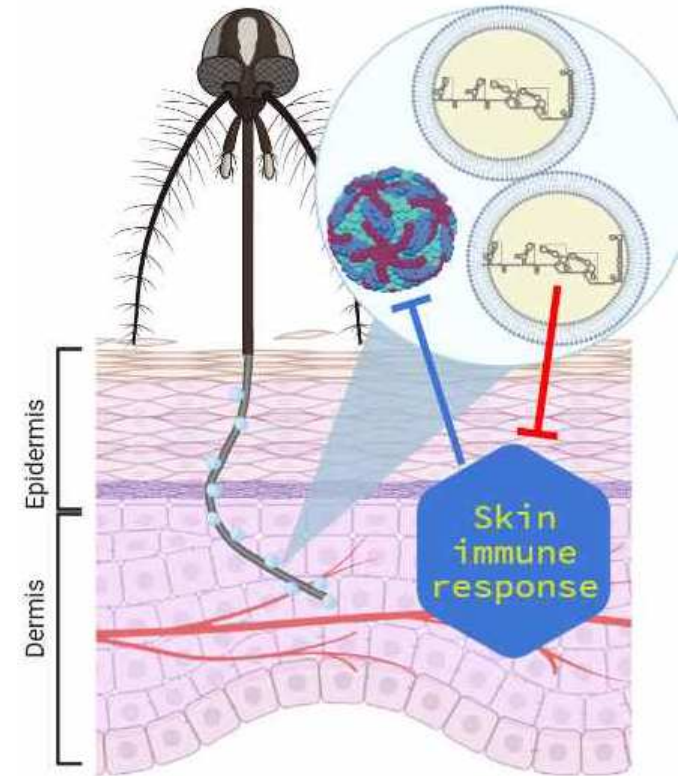
Cibler la transmission par piqûre



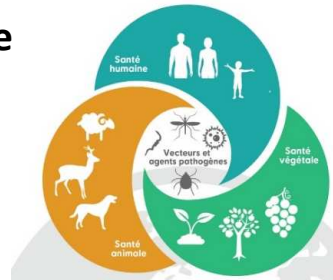
Cibler la piqûre

1. Commun à tous les flavivirus
2. Point faible de la transmission
3. Ne cible pas le virus:
Pas d'effet secondaire
Pas de résistance du virus

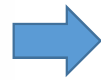
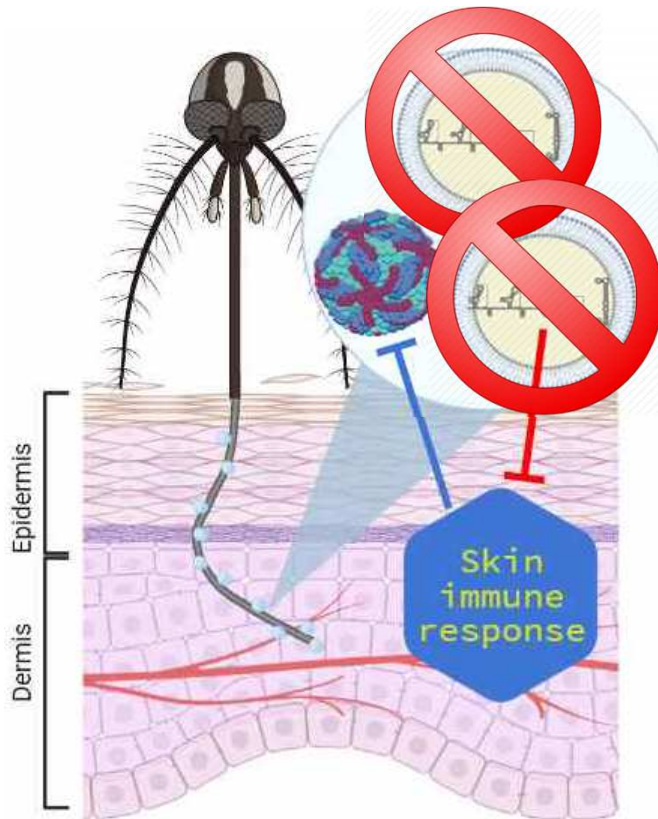
Chez tous les flavivirus !



Yeh et al. 2022. eLife



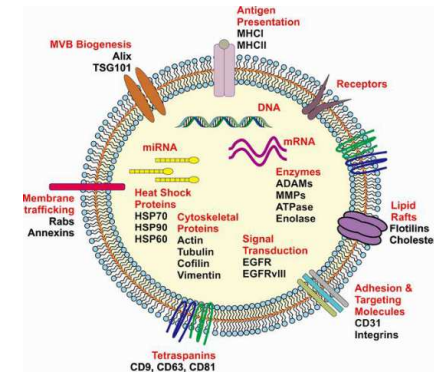
Une cible universelle contre tous les flavivirus !



Blocage de la transmission

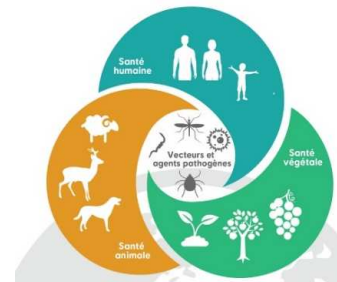
Plan de développement:

1. Immuniser contre les vésicules salivaires



2. Tester la protection contre tous les flavivirus

3. Vacciner contre une protéine de la vésicule



Le matériel et les infrastructures sont disponibles

1. Les outils de recherche

Détection et production des vésicules salivaires
Arbovirologie
Entomologie

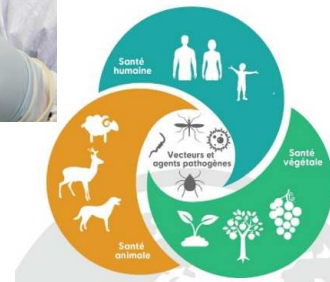


2. Les infrastructures

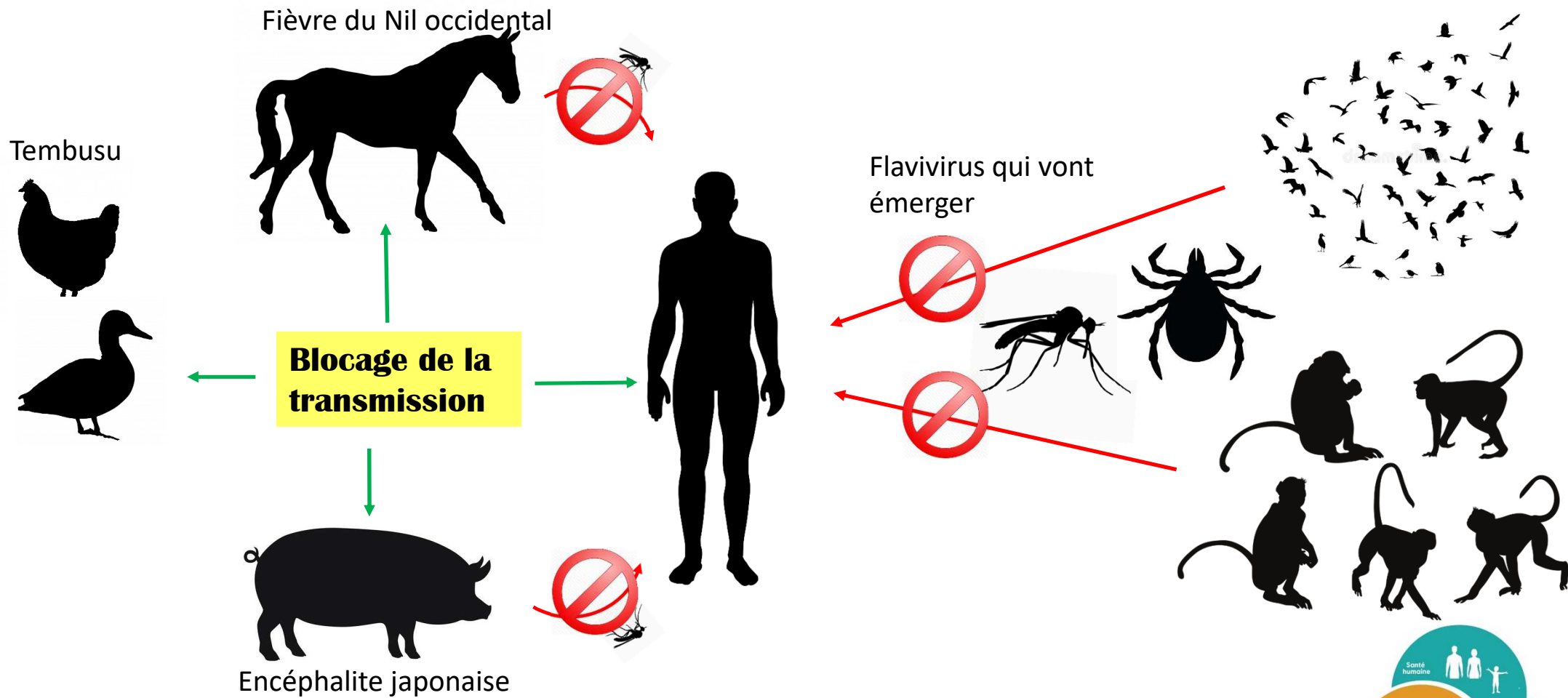
BSL3 VectoPole
Insectarium
Animalerie (Responsable)



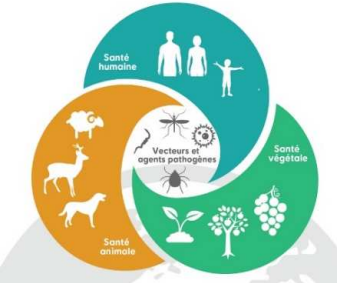
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Protéger contre tous les flavivirus des hommes ... et des animaux !



Journée valorisation
28 avril 2022



UN health agency launches bid to stop a new global pandemic

