



Montpellier, December 14th, 2022



Michael Singer



Thomas Onchuru



Ben Matthews



Francois de Sales  
Hien



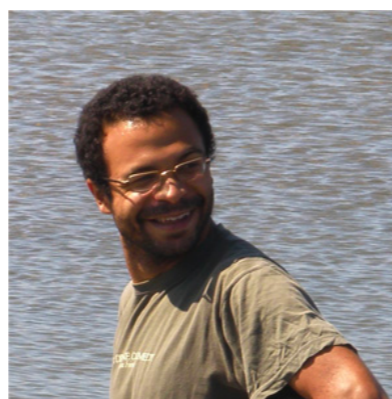
Emmanuelle  
Jacquin-Joly



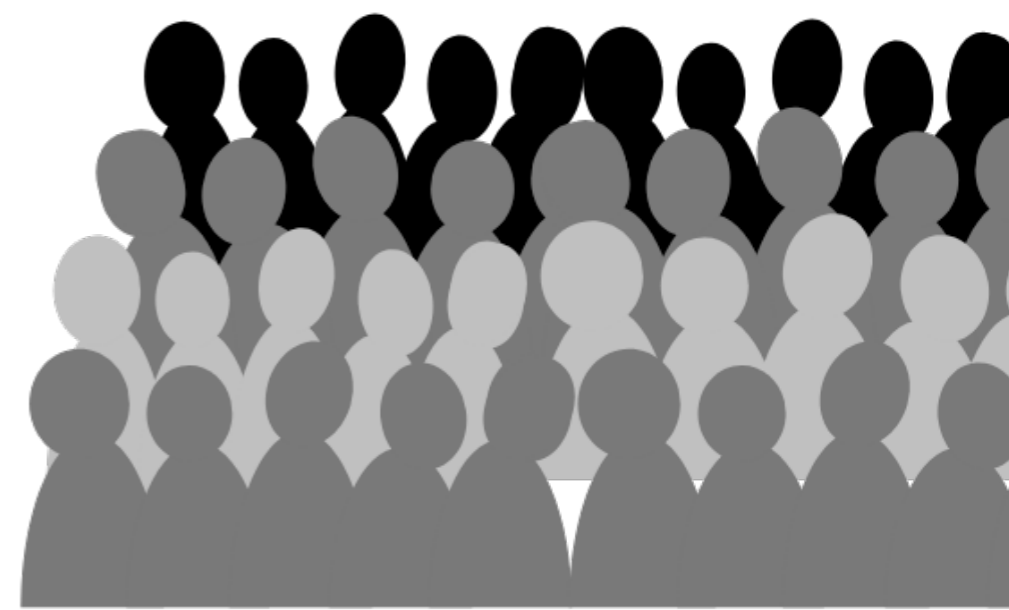
Thierry Lefevre



Patrik Nosil



Nicolas Rode



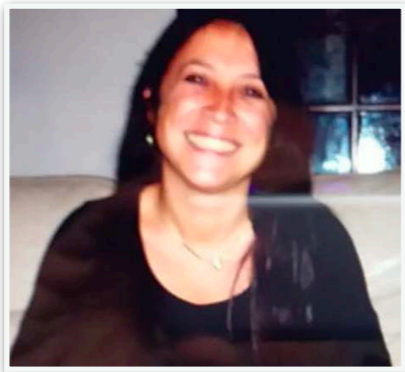
# Vector Revolution III



Katia Grucker



Olivier Roux



Valerie Delplanque



Nil Rahola



UNIVERSITÉ DE  
MONTPELLIER



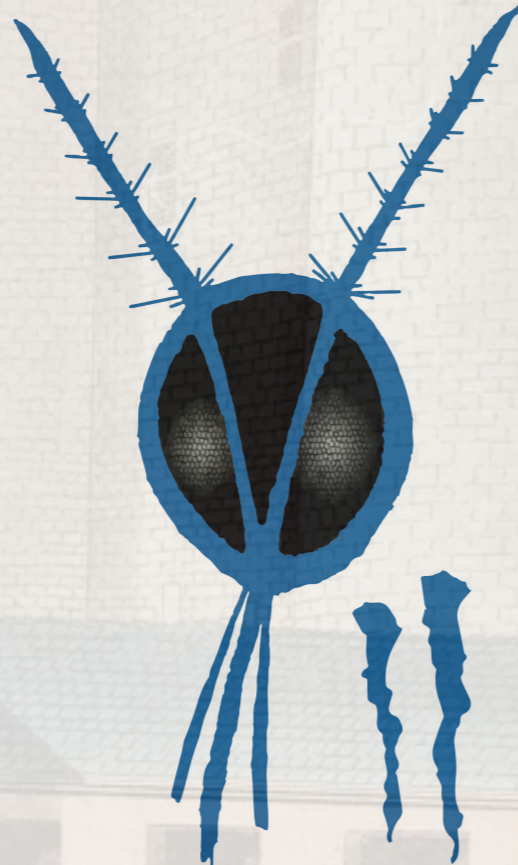
Photo: N Rahola (IRD)



VECTOR REVOLUTION

2018

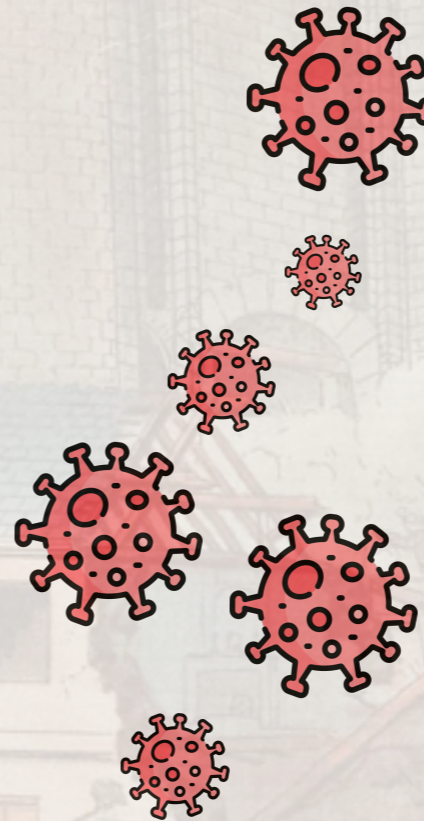
A SYSTEM IN EVOLUTION



VECTOR REVOLUTION -

2019

ECOLOGY AND EVOLUTION IN  
THE URBAN JUNGLE



VECTOR REVOLUTION

2022

TO CHOOSE OR NOT TO  
CHOOSE, THAT'S THE QUESTION

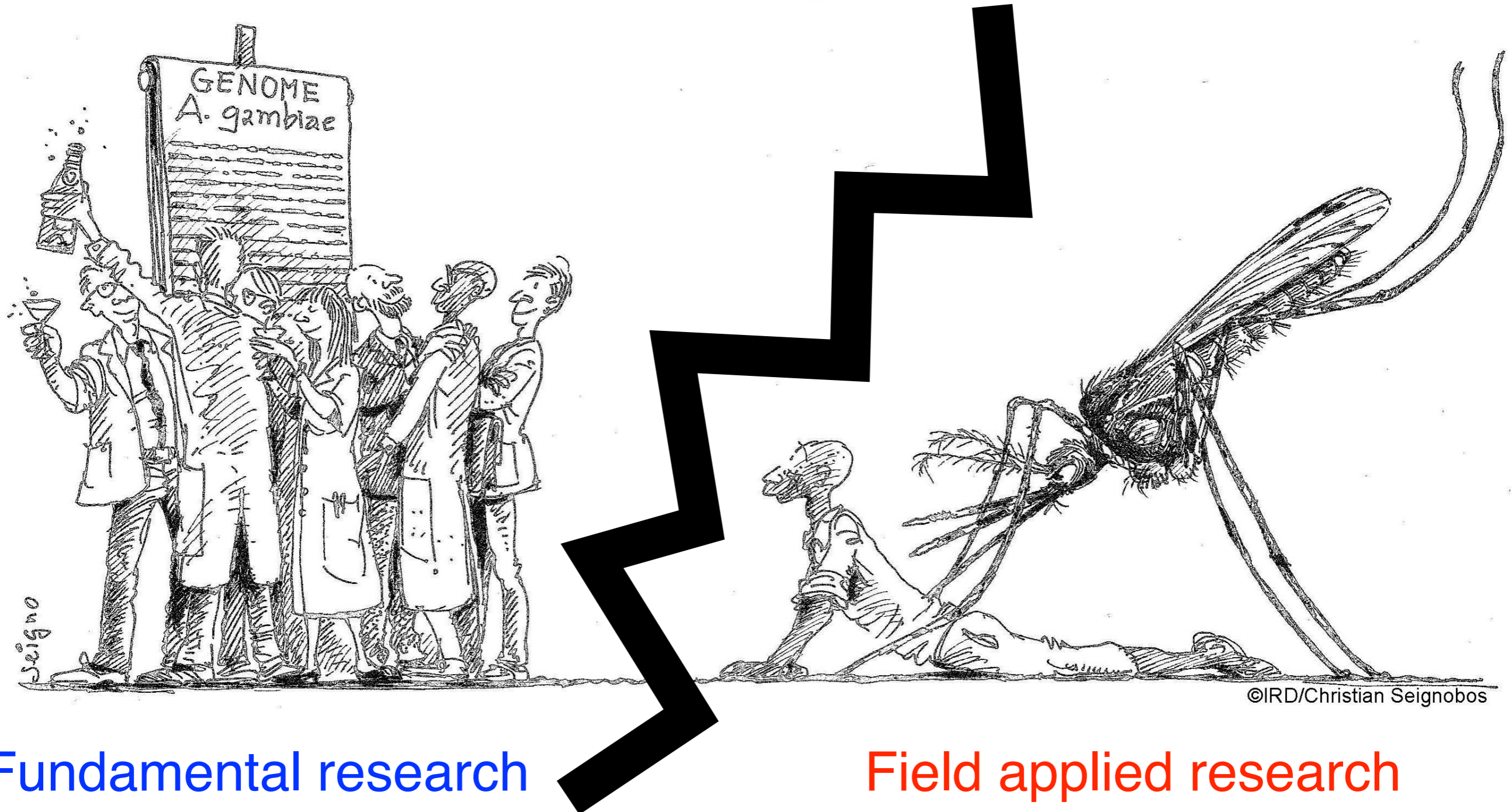


THE REVOLUTION  
WILL NOT STOP



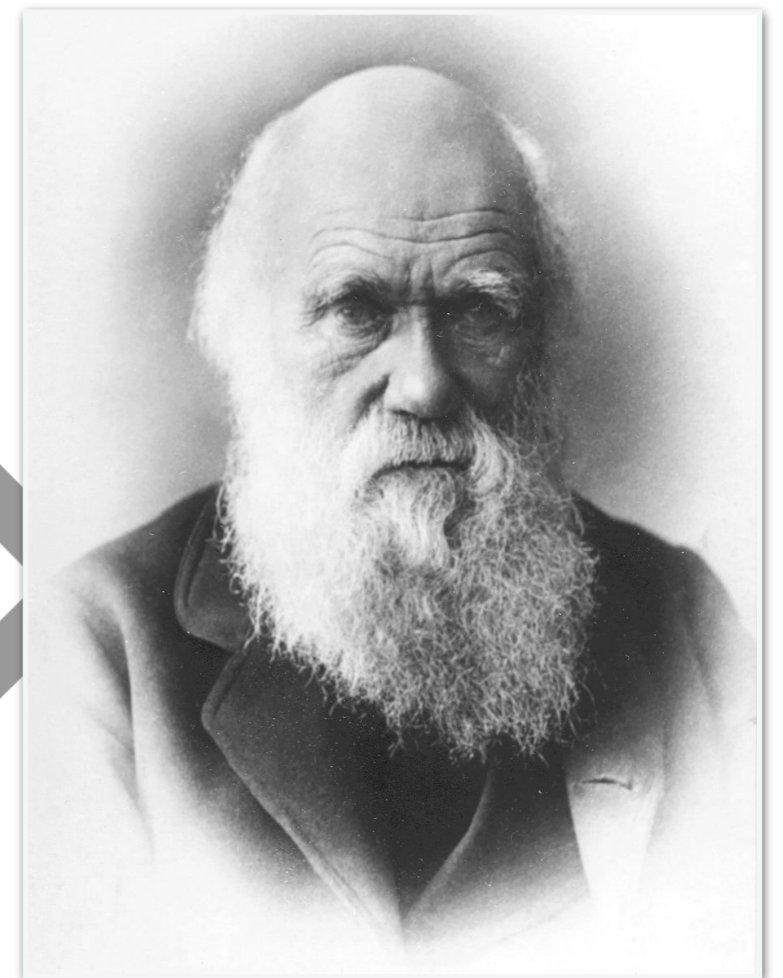
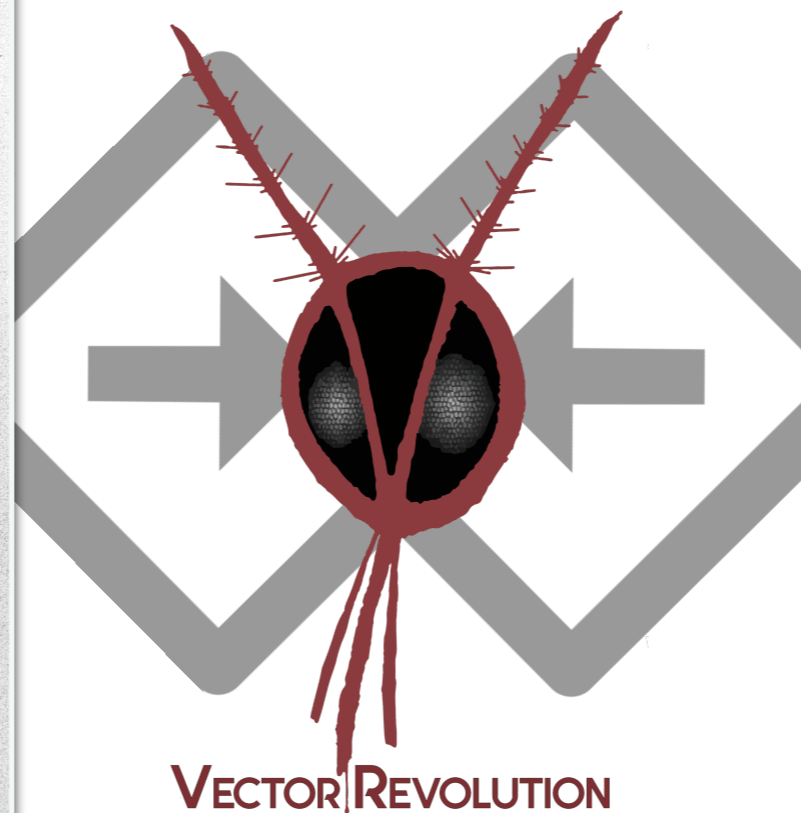
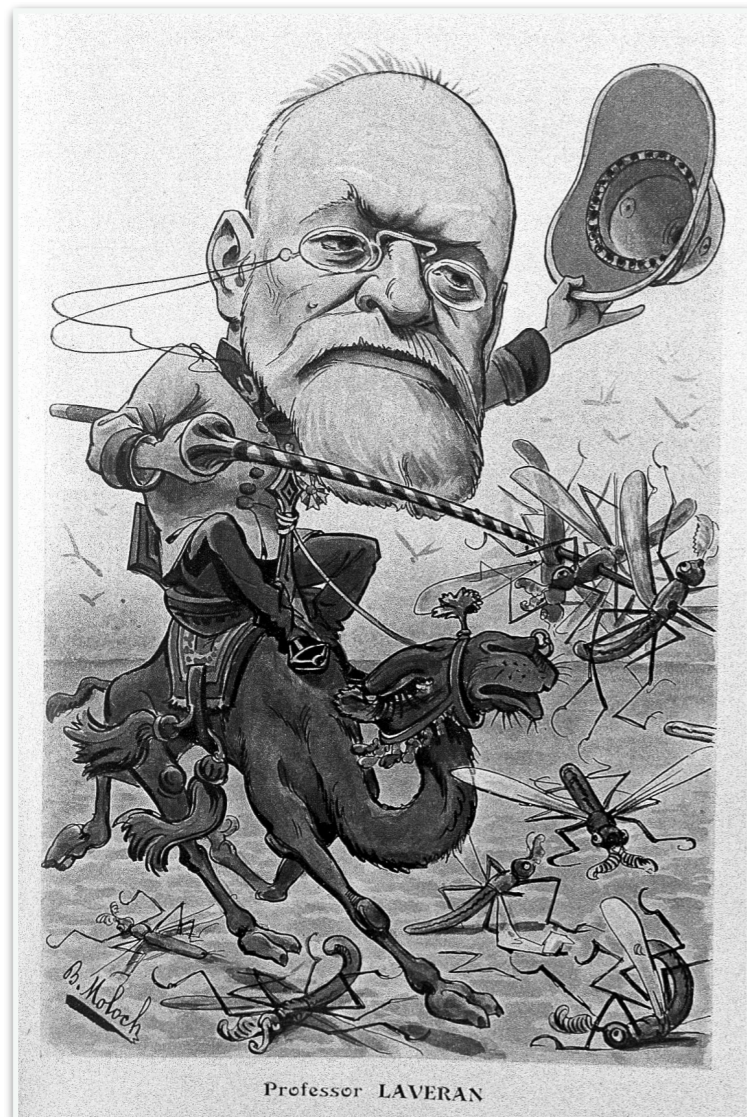
From the field , to the lab

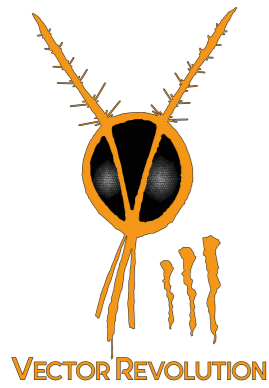
From the South , to the North



# Our AIM

Building bridges between vectorial and evolutionary systems





# To choose or not to choose, that's the question

You are capable of more than you know. Choose a goal that seems right for you and strive to be the best, however hard the path. Aim high. Behave honorably. Prepare to be alone at times, and to endure failure. Persist! The world needs all you can give.

**E. O. Wilson**

I, not events, have the power to make me happy or unhappy today. I can choose which it shall be. Yesterday is dead, tomorrow hasn't arrived yet. I have just one day, today, and I'm going to be happy in it.

**Groucho Marx**

Choose your love, Love your choice.

**Thomas S. Monson**

Choose a job you love, and you will never have to work a day in your life.

**Unknown**

I choose my friends for their good looks, my acquaintances for their good characters, and my enemies for their intellects. A man cannot be too careful in the choice of his enemies.

**Oscar Wilde**

Choose rather to be strong of soul than strong of body.

**Pythagoras**

Be nice to your children. After all, they are going to choose your nursing home.

**Steven Wright**

You can't choose your family, but you can choose your friends.

**Scott Hall**

An artist must be free to choose what he does, certainly, but he must also never be afraid to do what he might choose.

**Langston Hughes**

The most important thing is, whatever you do decide to choose, take it seriously and do your best.

**Tom Sturridge**

If we choose, we can live in a world of comforting illusion.

**Noam Chomsky**

Not everyone gets to be a winner unless they choose to be. Winning is a mentality.

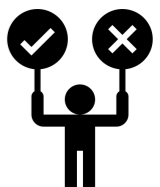
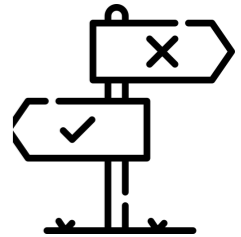
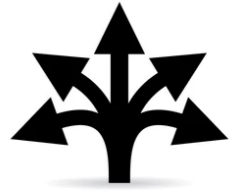
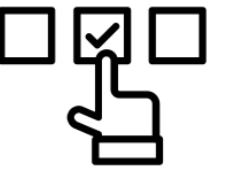
**Valentin Chmerkovskiy**

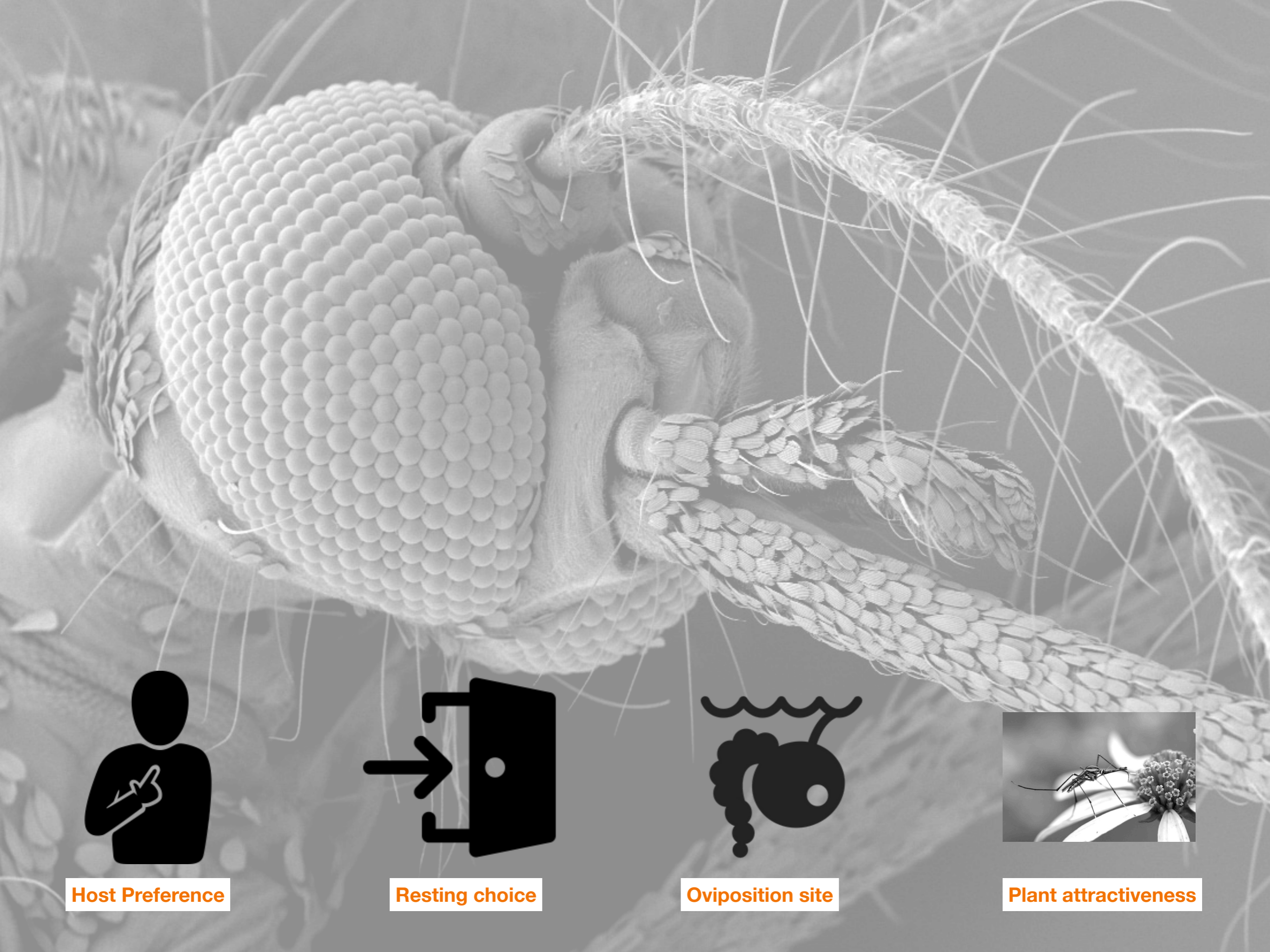
One must choose in life between boredom and suffering.

**Madame de Stael**

If you choose not to decide, you still have made a choice.

**Neil Peart**





Host Preference



Resting choice



Oviposition site



Plant attractiveness

Theme: “To choose or not to choose, that is the question”

AGROPOLIS, Montpellier, France

December 14<sup>th</sup>, 2022

9:00 – 9:20 Diego Ayala, Meeting Presentation & Objectives

9:20 – 10:00 Michael Singer (CNRS, France)

**Butterfly oviposition preference: its complexity, its dimensionality and its observed evolution in nature.**

10:00 – 10:40 Patrick Nosil (CEFE, France)

**Predicting change in complex eco-evolutionary systems**

10:40 – 11:10 COFFEE BREAK

11:10 – 11:50 Thierry Lefèvre (MIVEGEC, France)

**Field evidence for manipulation of mosquito host choice by the human malaria parasite**

11:50 – 12:30 Benjamin Matthews (University of British Columbia, Canada)

**Oviposition behavior in the mosquito *Aedes aegypti***

12:30 – 14:00 LUNCH

14:00 – 14:40 Francois Hien de Salle (IRSS, Burkina Faso)

**Role of natural sugar sources and antimalarial molecules on malaria transmission**

14:40 – 15:20 Emmanuelle Jacquin-Joly (IEES, France)

**To choose or not to choose a good mate: evolution of sex pheromone receptors in moths**

15:20 – 15:50 COFFEE BREAK

15:50 – 16:30 Thomas Onchuru (ICIPE, Kenya)

**Interaction dynamics between a malaria transmission-blocking symbiont and its *Anopheles* host**

16:30 – 17:10 Nicolas Rode (CBGP, France)

**Rapid and transient evolution of local adaptation to seasonal host fruits in the invasive pest *Drosophila suzukii***

17:20 – 17:40 Olivier Roux, Final Remarks & Meeting Closure



## Funding:

## Contact:

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Katia Grucker [katia.grucker@ird.fr](mailto:katia.grucker@ird.fr)

# Welcome to **VECTOR** **REVOLUTION**

