



# POPULATION GENETICS OF *ESCHERICHIA COLI*

Beyond its major role in the discovery of the basic principles of genetic and molecular biology thanks to a couple of strains such as "K-12", *Escherichia coli* is a key component of the bird and mammal, including human, gut microbiota as well as water and sediments. Commensal, saprophyte but also opportunistic pathogen, *E. coli* has been ranked this year by WHO first in the critical priority group of antibiotic-resistant bacterial pathogens. A better characterization of the ecological and evolutionary forces shaping the population structure of the species is mandatory for the understanding of the emergence of resistance and virulence.

On the occasion of Erick Denamur' retirement, this symposium will be a "tour de table" of what has been done during the last 25 years on the Bichat campus within his lab, in close relationships with various colleagues. Structured in three main sessions, the symposium will tackle commensalism, virulence and resistance aspects. It will terminate by an historical perspective.

**Tuesday 3<sup>rd</sup> of December 2024 at 10 a.m**  
UPC Bichat Campus, between the Sacré Coeur and the flea market  
16 rue Henri Huchard, 75018 PARIS

**Registration : <https://sondage.app.u-paris.fr/338192>**





Université  
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PARIS NORD



Institut  
Microb'UP

Welcoming

10h

**Erick Denamur**

*IAME*

**Ivan Matic**

*Institut Cochin*

Welcoming

Introduction

10h15 - 12h15 - Session 1

10h15

**Eduardo Rocha**

*Institut Pasteur*

Phylogenomics of the *E. coli* species

10h45

**Olivier Tenaillon**

*Institut Cochin*

The *E. coli* long-term evolution experiment

11h15

**François Blanquart**

*Collège de France*

The commensal lifestyles of *E. coli*

11h45

**Victoire de Lastours & Guilhem Royer**

*IAME*

*Hôpital Mondor*

*E. coli* bloodstream infections: clinical and bacterial aspects

12h15  
Lunch

13h30 - 15h30 - Session 2

13h30

**Eric Oswald**

*Université de Toulouse*

*E. coli* and colibactin

14h00

**Eugen Pfeifer**

*INRAE*

Phage and phage plasmids as AMR gene vectors

14h30

**Aude Bernheim**

*Institut Pasteur*

Anti-phage defense systems in *E. coli*

15h00

**Imane El Meouche**

*IAME*

Tolerance in natural *E. coli* isolates

15h45 - 16h30 - Session 3

15h45

**Laurent Poirel**

*Université de Fribourg (Suisse)*

The antibiotic resistance of *E. coli* since the beginning of the 20th

16h15

**Ivan Matic**

*Institut Cochin*

Synthesis

16h30 Coffee break

17h00 - 18h00 - Keynote session

17h00

**Erick Denamur**

*IAME*

Le colibacille de Escherich à IAME

18h  
Closing

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