Paul Henriot

Age: 28 **Phone**: +33 6 65 21 49 50

Email: paul.henriot@protonmail.com

EDUCATION Conservatoire national des arts et métiers - HESAM Université (Paris, France)

2023: PhD in Public Health

Université Rennes 1 - Agrocampus Ouest (Rennes, France)

2019: Master's degree in ecological modelling

Université Paris II, Panthéon-Assas (Paris, France)

2017 : Bachelor's degree in economic analysis

RESEARCH EXPERIENCE

September 2020 -November 2023 PhD in Public Health - Conservatoire national des arts et métiers (MESuRS Laboratory, Paris, France)

phenriot.github.io

Title:

I was the co-representative of PhD students on the Cnam Scientific Committee. $Modelling\ HCV$ transmission in hospital settings: from assessment to control, an application to the Egyptian context.

The three main objectives of this thesis were:

i. To conduct a meta-analysis of the per-procedure risk of HCV infection in hospitalised patients:

ii. To conduct a risk assessment to identify patient profiles at risk of HCV infection and hotspots of HCV transmission in an Egyptian hospital; and

iii. To develop an agent-based model of bloodborne pathogen transmission in hospitals that can be applied in different contexts.

 $I\ was\ the\ co-representative\ of\ PhD\ students\ on\ the\ Cnam\ Scientific\ Committee.$

September 2019 -September 2020 Modelling engineer, Inserm - Institut Pasteur (EMEA Unit, Paris, France)
I built a mechanistic model for the persistence of antibiotic resistance genes in anthropised aquatic environments and estimated its parameters using MCMC techniques.

January-June 2019

Research intern in epidemiological modelling, Conservatoire national des arts et métiers (MESuRS Laboratory, Paris, France)

I extended a compartmental model of MRSA transmission in pigs (using C++) that I had previously built and performed a risk assessment analysis to study LA-MRSA colonisation in French pork consumers.

April-May 2018

Research intern in epidemiological modelling, Conservatoire national des arts et métiers (Laboratoire MESuRS, Paris, France)

I Implemented a stochastic compartmental model of the spread of methicillin-resistant Staphylococcus aureus (MRSA) in pig herds in French slaughterhouses (Using R).

 $\textbf{SKILLS} \qquad \qquad \textbf{\textit{Programming-Modelling:}} R, \ C++$

 ${\bf LANGUAGES} \qquad \quad \textit{French} \,: \, \textit{Native}$

English: Fluent Spanish: Intermediate

PUBLICATIONS

- Kovacevic A., Smith D.R.M., Rahbé E., Novelli S., **Henriot P.**, Varon E., Cohen R., Temime L., Opatowski L. *COVID-19 pandemic responses impact the spread of antibiotic-resistant bacteria: a modelling study. eLife (accepted), 2024*
- Henriot P., Anwar W. A., El Gaafary M., Abdo S., Rafik M., Hussein W. M., Sos D., Magdy I., Jean K., Temime L. Preventing introgenic HCV infection: A quantitative risk assessment based on observational data in an Egyptian hospital. Plos Global Public Health (accepted), 2024
- Henriot P., El Kassas M., Anwar W., Abdo S., Jean K., Temime L. An agent-based model to simulate the transmission dynamics of bloodborne pathogens within hospitals medRxiv (preprint, submitted), 2023.
- Smith, D.R.M., Jijón, S., Oodally, A., Shirreff, G., Aït Bouziad, K., Ante-Testard, P.A., Bastard, J., Bouziri, H., Daouda, O.S., Duchemin, T., Godon-Rensonnet, A.-S., **Henriot, P.**, Houri, Y., Neynaud, H., Perozziello, A., Thonon, F., Crépey, P., Dab, W., Jean, K., Temime, L. Sick leave due to COVID-19 during the first pandemic wave in France, 2020. Occup Environ Med oemed-2022-108451, 2022
- Henriot, P., Castry, M., Luong Nguyen, L.B., Shimakawa, Y., Jean, K., Temime, L. Meta-analysis: risk of hepatitis C virus infection associated with hospital-based invasive procedures. Aliment Pharmacol Ther. 2022; 56: 558–569, 2022
- Henriot P., Buelow E., Petit F., Ploy M.C., Dagot C., Opatowski L. Modelling the impact of urban and hospital wastewaters eco-exposomes on the antibiotic-resistance dynamics. (preprint, under review), 2021

CONFERENCES & SEMINARS (Posters)

- International Conference on Infectious Disease Dynamics (EPIDEMICS), 2023. Henriot P, Anwar W, El Gaafary M, Abdo S, Rafik M, Hussein W, Sos D, Magdy I, Jean K, Temime L. An agent-based model to simulate the transmission dynamics of bloodborne pathogens within hospitals
- European Congress of Clinical Microbiology Infectious Diseases (ECCMID), 2023.
- P. Henriot, W. A. Anwar, W. M. Hussein, I. M Mossad, K. Jean, L. Temime. Preventing introgenic HCV infection: A quantitative risk assessment based on observational data in an Egyptian hospital.
- Journées scientifiques de l'ANRS, 2022.
- P. Henriot, W. A. Anwar, W. M. Hussein, I. M Mossad, K. Jean , L. Temime. Risk assessment of introgenic HCV infection in patients of an Egyptian hospital.
- International Conference on Infectious Disease Dynamics (EPIDEMICS), 2021. Henriot P, Buelow E, Petit F, Ploy MC, Dagot C, Opatowski L. Modelling the impact of the urban and hospital eco-exposome on the dynamics of antibiotic resistance in effluents.
- International Conference on Prevention Infection Control (ICPIC), 2021.

 P. Henriot, M. Castry, L. B. Luong Nguyen, Y. Shimakawa, K. Jean, L. Temime. Risk of HCV infection associated with hospital-based invasive procedures: a systematic review and meta-analysis.

CONFERENCES & SEMINARS (Oral)

- Journées de l'Action Coordonnée "Modélisation des maladies infectieuses", 2023.
- Henriot P, Anwar W, El Gaafary M, Abdo S, Rafik M, Hussein W, Sos D, Magdy I, Jean K, Temime L. An agent-based model to simulate the transmission dynamics of bloodborne pathogens within hospitals.
- Réunion annuelle AC42 ANRS Réseau national hépatites virales, 2023. Henriot P, Anwar W, El Gaafary M, Abdo S, Rafik M, Hussein W, Sos D, Magdy I, Jean K, Temime L. An agent-based model to simulate the transmission dynamics of bloodborne pathogens within hospitals with an application to HCV.