

Paul Henriot

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phenriot.github.io

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)

Title : *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).

SKILLS

Programming-Modelling : R, C++

LANGUAGES

French : Native

English : Fluent

PUBLICATIONS

- Kovacevic A., Smith D.R.M., Rahbé E., Novelli S., **Henriot P.**, Varon E., Cohen R., Temime L., Opatowski L. Revealing the drivers of antibiotic resistance trends in *Streptococcus pneumoniae* amidst the 2020 COVID-19 pandemic: Insights from mathematical modelling. *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 iatrogenic HCV infection: A quantitative risk assessment based on observational data in an Egyptian hospital. *PLOS Global Public Health* 4(2): e0002821.
- **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 iatrogenic 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 iatrogenic 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.