

CURRICULUM VITAE

Name: Dr Pascal Crépey
Academic title: Professor
Date of birth: April 30, 1980
Affiliation: Ecole des Hautes Etudes en Santé Publique (EHESP) ;
Université de Rennes, CNRS, Inserm, Arènes - UMR 6051,
RSMS – U 1309
Address: 15 avenue du Pr. Léon-Bernard, 35043 Rennes
Phone: +33 6 79 69 92 40
E-Mail: pascal.crepey@ehesp.fr
Present academic position: Researcher & Lecturer at EHESP

Research interests

Vaccination, Epidemiologic surveillance, Infectious Disease Epidemiology, Mathematical Modelling

Professional positions

Since 2010 Researcher and Lecturer in Biostatistics and Epidemiology, Ecole des Hautes Etudes en Santé Publique, Rennes, France
2006 – 2010 Health economist and modeling expert, in charge of health economic modeling studies regarding influenza and pediatric vaccines worldwide, Sanofi Pasteur, Lyon, France
2003 – 2006 Doctoral fellow, supervised by Dr Marc Barthélemy, UMR-S 707, Inserm, Univ. Pierre & Marie Curie, Paris France

Other academic and administrative functions

Since 2024 Co-coordinator of the working group “Vaccine strategy” in the Coordinated Action “Vaccines against respiratory viruses” founded by ANRS-MIE
Since 2022 Co-coordinator of the working group “Pandemic preparedness” in the Coordinated Action “Modeling of infectious diseases” founded by ANRS-MIE
Since 2018 Editorial board member “BMC Public Health”
2015 – 2021 Elected member of the administrative council of Epiter (www.epiter.org)
2015 – 2021 Head of the biostatistics track in the Master of Public Health program from EHESP
Since 2011 Coordinator of the Field epidemiology training course IDEA co-organized by EHESP and Santé publique France

Education

2003 – 2008 PhD in biostatistics and biomathematics, Univ. Pierre & Marie Curie, Paris, France
Subject: « Spatiotemporal dynamics of epidemics in multi-scale networks »
2001 – 2003 Master of Science in artificial intelligence, Univ. Pierre & Marie Curie, Paris, France

Currently funded projects as principal investigator or cooperation partner

2025 – 2028	Orchidée - Organization of a Network of Hospital Centers Involved in Epidemiological Surveillance and Emergency Response (Funded by European Union)
2025 – 2028	Pipeline - Enhancing preparedness and response to infections affecting pregnant people and infants across Europe (Funded by European Union and ANRS-MIE)
2024 – 2027	ARCANE - Antimicrobial Resistance Control through Adaptive healthcare Networks (funded by ANR and DFG) (PI)
2023 – 2025	Programme de renforcement des interventions pré et post-épidémies (RIPOSTE) (funded by French Red Cross) (workpackage lead)
2022 – 2025	MPX-Spread - Characterizing the spreading dynamics of 2022 monkeypox outbreak in France to aid public health policies (funded by ANRS-MIE) (workpackage lead)
2022 – 2025	FluCovid – Assessment of Influenza and COVID-19 burden in Europe (funded by NIVEL) (PI)

Supervision experiences (last 5 years)

Postdoctoral fellows: Jonathan Roux (2018-2021), Pauline Clin (2023-2024), Hugo Martin (2024-2025)

Project manager: Anne-Laure Maillard (2024), Asma Haddad (2024-2025)

PhD students: Shrichand Bhuria (2024-2027), Thibaut Koutangni (2014-2019, with Dr Judith Mueller), Narimane Nekkab (2015-2018, with Laura Temime)

Medical interns: Clément Massonnaud (2019,2020), Fadi El Khoury (2022)

MPH interns: Asma Haddad (2024), Fadi El Khoury (2021), Clément Massonnaud (2019)

Published books and book chapters

- *Surveillance épidémiologique et veille sanitaire : Principes, méthodes et applications en santé publique* – Lavoisier Médecine, 2023 – Pascal Astagneau, **Pascal Crépey** (editors)
- *Glossaire d'épidémiologie : 50 notions pour comprendre la pandémie de Covid-19* – Presses de l'EHESP, 2021 – Mélanie Bertin, **Pascal Crépey**, Séverine Deguen, Olivier Grimaud, Nolwenn Le Meur, Emmanuelle Leray, Judith Muller, Cindy Padilla, Jonathan Roux, Philippe Glorennec.
- *Épidémiologie de terrain : sept études de cas* – Presses de l'EHESP, 2018 – Thierry Ancelle, Brigitte Helynck, **Pascal Crépey**
- *Chapitre 18. Surveillance* (Nolwenn Noisel, Juliette Bloch, Magali Corso, **Pascal Crépey**, Sébastien Denys, Marjolaine Dubé, Clémence Fillol, Philippe Glorennec, Isabelle Goupil-Sormany, Félix Lamothe, Germain Lebel, Gabriela Ponce, Mathieu Valcke, Ohri Yamada) dans *Environnement et santé publique : Fondements et pratiques* – Presses de l'EHESP, 2023 - Isabelle Goupil-Sormany, Maximilien Debia, Philippe Glorennec, Jean-Paul Gonzalez, Nolwenn Noisel (editors)

Ten most relevant publications (out of 59 peer-reviewed PubMed-listed publications, over 1400 citations, h-index 20, i10-index 39)

- J Roux, CR Massonnaud, V Colizza, S Cauchemez, **P Crépey** (2023) [Modeling the impact of national and regional lockdowns on the 2020 spring wave of COVID-19 in France](#), Scientific Reports, 13 (1), 1834
- Bronke Boudewijns, John Paget, Marco Del Riccio, Laurent Coudeville, **Pascal Crépey**, 2022. « Preparing for the upcoming 2022/23 influenza season: A modelling study of the susceptible population in Australia, France, Germany, Italy, Spain and the United Kingdom ». Influenza Resp Viruses irv.13091. <https://doi.org/10.1111/irv.13091>
- Clément R. Massonnaud, Jonathan Roux, Vittoria Colizza, **Pascal Crépey**, 2022. «Evaluating COVID-19 Booster Vaccination Strategies in a Partially Vaccinated Population: A Modeling Study. » *Vaccines* 10, 479. <https://doi.org/10.3390/vaccines10030479>
- Pascal Crépey**, Harold Noël, Samuel Alizon, 2022. « Challenges for mathematical epidemiological modelling. » *Anaesthesia Critical Care & Pain Medicine* 41, 101053.

<https://doi.org/10.1016/j.accpm.2022.101053>

- Cécile Tran Kiem, Paolo Bosetti, Juliette Paireau, **Pascal Crépey**, Henrik Salje, Noémie Lefrancq, Arnaud Fontanet, et al. 2021. « SARS-CoV-2 Transmission across Age Groups in France and Implications for Control ». *Nature Communications* 12 (1): 6895. <https://doi.org/10.1038/s41467-021-27163-1>.
- Cécile Tran Kiem, **Pascal Crépey**, Paolo Bosetti, Daniel Levy Bruhl, Yazdan Yazdanpanah, Henrik Salje, Pierre-Yves Boëlle, Simon Cauchemez. 2021. « Lockdown as a Last Resort Option in Case of COVID-19 Epidemic Rebound: A Modelling Study ». *Eurosurveillance* 26 (22). <https://doi.org/10.2807/1560-7917.ES.2021.26.22.2001536>.
- Jonathan Roux, Narimane Nekkab, Mélanie Colomb-Cotin, Pascal Astagneau, **Pascal Crépey**. 2021. « Time-Series Modelling for the Quantification of Seasonality and Forecasting Antibiotic-Resistant Episodes: Application to Carbapenemase-Producing Enterobacteriaceae Episodes in France over 2010–20 ». *Journal of Antimicrobial Chemotherapy* 76 (1): 226-32. <https://doi.org/10.1093/jac/dkaa388>.
- Nekkab, Narimane, **Pascal Crépey**, Pascal Astagneau, Lulla Opatowski, Laura Temime. 2020. « Assessing the Role of Inter-Facility Patient Transfer in the Spread of Carbapenemase-Producing Enterobacteriaceae: The Case of France between 2012 and 2015 ». *Scientific Reports* 10 (1): 14910. <https://doi.org/10.1038/s41598-020-71212-6>.
- Rania Assab, Narimane Nekkab, **Pascal Crépey**, Pascal Astagneau, Didier Guillemot, Lulla Opatowski, Laura Temime. 2017. « Mathematical Models of Infection Transmission in Healthcare Settings: Recent Advances from the Use of Network Structured Data ». *Current Opinion in Infectious Diseases* 30 (4): 410-18. <https://doi.org/10.1097/QCO.0000000000000390>.
- Narimane Nekkab, Pascal Astagneau, Laura Temime, **Pascal Crépey**. 2017. « Spread of Hospital-Acquired Infections: A Comparison of Healthcare Networks ». Édité par Mark M. Tanaka. *PLOS Computational Biology* 13 (8): e1005666. <https://doi.org/10.1371/journal.pcbi.1005666>.