

CURRICULUM VITAE

Name: Dr Pascal Crépey
Academic title: Professor
Date of birth: April 30, 1980
Affiliation: Ecole des Hautes Etudes en Santé Publique (EHESP) ;
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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 2020 Co-Coordinator of the working group “Pandemic preparedness” in the Coordinated Action “Modeling” 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

- 2024 – 2027 ARCANE - Antimicrobial Resistance Control through Adaptive healthcare Networks (funded by ANR and DFG)
- 2023 – 2024 Programme de renforcement des interventions pré et post-épidémies (RIPOSTE) (funded by French Red Cross)
- 2022 – 2024 MPX-Spread - Characterizing the spreading dynamics of 2022 monkeypox outbreak in France to aid public health policies (funded by ANRS-MIE)
- 2022 – 2024 FluCovid – Assessment of Influenza and COVID-19 burden in Europe (funded by NIVEL)

Published books

Surveillance épidémiologique et veille sanitaire : Principes, méthodes et applications en santé publique – Lavoisier Médecine, 2023 – Pascal Astagneau, **Pascal Crépey** (editors)

Ten most relevant publications (out of 50 peer-reviewed PubMed-listed publications, over 1200 citations, h-index 18, i10-index 34)

- 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>.
- Christelle Elias , Anna Fournier, Anca Vasiliu, Nicolas Beix, Rémi Demillac, Hélène Tillaut, Yvonnick Guillois, Serge Eyebe, Bastien Mollo, **Pascal Crépey**. 2017. « Seasonal Influenza Vaccination Coverage and Its Determinants among Nursing Homes Personnel in Western France ». *BMC Public Health* 17 (1): 634. <https://doi.org/10.1186/s12889-017-4556-5>.
- 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>.