CURRICULUM VITAE

January 4, 2021

Stefano Merler, born in Trento (Italy) on December 13, 1968.
Director of the Center for Health Emergencies, Bruno Kessler Foundation.

Positions

1995 - 1996: Fellowship, ITC-IRST, Italy

1996 - 1999: Fellowship, Center of Alpine Ecology, Italy

1999 - present: Senior Researcher (permanent position), Bruno Kessler Foundation (FBK), Italy

2013 - 2020: Head of the DPCS (Dynamical Processes in Complex Societies) Research Unit at FBK.

2018 - present: Head of the FBK-FEM Joint Research Unit EPILAB.

2021 - present: Director of the FBK Center for Health Emergencies

Research

My research has covered a range of scientific aspects related to epidemiology and computational modelling of infectious diseases: large scale simulations of emerging infectious diseases, e.g. pandemic influenza, COVID-19; evaluation of mitigation/containment policies, with specific focus on pandemic influenza, COVID-19, and Ebola; effects of population heterogeneity and human mobility on the spatio-temporal spread of epidemics; antimicrobial resistance, e.g. klebsiella pneumoniae and Methicillin-resistant Staphylococcus aureus (MRSA); impact of demographic changes on the transmissibility of childhood diseases, e.g. measles and varicella; effects of risk perception, vaccination choices and spontaneous behavioural changes on disease spreading (e.g. measles, varicella); dynamics and control of vector-borne diseases, e.g. Chikungunya, Yellow fever, Zika, Dengue.

- Author of 132 research papers, with 113 journal papers (cumulative impact factor: 702) and 20 conference proceedings and book chapters; h-index: 45 (Google Scholar), 32 (Scopus); total citations: 10115 (Google Scholar), 4845 (Scopus).
- Awarded with the 15th Bellman Prize (2015)
- Awarded with the 2016 Aspen Prize
- Academic editor of PLOS ONE (2013-2017)
- Reviewer for most influential journals of infectious diseases (The Lancet, The Lancet Infectious Diseases, Science, PNAS, Nature Communication, BMC Medicine, Eurosurveillance, Emerging Infectious Diseases, PLOS Computational Biology)

Grants

- Fondazione VRT, 2020-2020, €87.300
  COVIDTN - Epidemiologia e trasmissione di COVID-19 in Trentino
  Role: Team Coordinator
- Horizon 2020, 2020-2024, €309.000
  MOOD - Monitoring outbreak events for disease surveillance in a data science context
  Role: Team Coordinator
- Horizon 2020, 2018-2021, €230.000
  VESTEC - Visual Exploration and Sampling Toolkit for Extreme Computing
  Role: Team Member
- Agenzia Italiana per la Cooperazione allo Sviluppo, 2018-2021, €543.677
  Reinforcement of the surveillance system and control of infectious diseases in Ethiopia
  Role: Team Coordinator
- Seqirus S.r.l., 2019, €14.500
  Post-hoc cost-effectiveness analysis of the FLUCELVAX QUADRIVALENT^{TM} influenza vaccine in Italy: analysis from a dynamic model of influenza transmission
  Role: Team Coordinator
- Ospedale Pediatrico Bambino Gesù, 2018-2019, €32.500
  Effect of introduction of FLUCELVAX QUADRIVALENT^{TM} influenza vaccine on exsting influenza vaccination programme in Italy: a modelling and cost-effectiveness analysis
  Role: Team Coordinator

- Merck Sharp & Dohme Corp., 2018-2019, €98.000
  Hypothesis of exogenous boosting and epidemiology of varicella and herpes zoster in the US.
  Role: Team member

- Italian Ministry of Health, 2018-2019, €30.000
  Traiettoria evolutiva del virus USUTU in aree endemiche del nord-est d'Italia e valutazione del rischio di trasmissione all'uomo tramite trasfusione di sangue
  Role: Team Member

- Akershus University Hospital and Norwegian Institute of Public Health, 2017-2018, €15,000
  Modelling the transmission and control of methicillin-resistant *Staphylococcus aureus* in community and health care institutions
  Role: Team Member

- Fondazione Edmund Mach, 2017-2018, €15,000
  Training di un ricercatore FEM riguardo l'implementazione di tecniche computazionali per lo sviluppo di modelli epidemiologici per la diffusione di malattie trasmesse da zanzare ed in particolare dal virus Zika
  Role: Team Coordinator

- Horizon 2020, 2015-2018, €198.750
  CIMPLEX - Participatory, Interactive Social Exploratories: Bringing together Citizens, Models and Data
  Role: Team Coordinator

- Grandi Progetti, Provincia di Trento, 2013-2017, €216.390
  LEXEM - Laboratory of Excellence for Epidemiology and Modelling. Facing the invasion of Invasive Alien Species (IAS) into the territory of the Province of Trento
  Role: Team Coordinator

- EC FP7 ICT, 2009-2013, €272.700
  EPIWORK - Developing the framework for an epidemic forecast infrastructure
  Role: Team Coordinator

- European Centre for Disease Prevention and Control (ECDC), 2009-2012, €26.449
  Vaccine preventable diseases modelling in the European Union and EEA/EFTA countries: forecasting the effect of introducing a new vaccine in a national/regional program
  Role: Team coordinator

- Italian Ministry of Health, 2009-2011, €30.000
  Messa a punto di strumenti epidemiologici per il monitoraggio dell'influenza in Italia
  Role: Team coordinator

- Italian Ministry of Health, 2009-2011, €140.000
  Supporto alle attività istituzionali correnti del CCM con particolare riguardo alle attività di sorveglianza, analisi e valutazione dei rischi per la salute pubblica nell'ambito della realizzazione e gestione di una sala situazioni e di una rete d'informazione rapida
  Role: Team coordinator

- EC FP7 HEALTH, 2008-2011, €212.757
  FLUMODCONT - Modelling the spread of pandemic influenza and strategies for its containment and mitigation
  Role: Team coordinator

- Italian Ministry of Health, 2008-2011, €100.000
  Chikungunya virus infection: epidemiological and clinical features
  Role: Team coordinator

Publications

[1] J. Zhang, M. Litvinova, Y. Liang, Y. Wang, W. Wang, S. Zhao, Q. Wu, S. Merler, C. Viboud, A. Vespignani, M. Ajelli, and H. Yu. Changes in contact patterns shape the dynamics of the covid-19 outbreak in china. *Science*, 2020. **[impact factor: 41.037]**.

[2] J. Zhang, M. Litvinova, W. Wang, Y. Wang, X. Deng, X. Chen, M. Li, W. Zheng, L. Yi, X. Chen, Q. Wu, Y. Liang, X. Wang, J. Yang, K. Sun, I. M. Longini Jr, M. E. Halloran, P. Wu, B. J. Cowling, S. Merler, C. Viboud, A. Vespignani, M. Ajelli, and H. Yu. Evolving epidemiology and transmission dynamics of coronavirus disease 2019 outside hubei province, china: a descriptive and modelling study. *The Lancet Infectious diseases*, 2020. **[impact factor: 27.516]**.

[3] P. Poletti, M. Tirani, D. Cereda, F. Trentini, G. Guzzetta, V. Marziano, S. Buoro, S. Riboli, L. Crottogini, R. Piccarreta, A. Piatti, G. Grasselli, A. Melegaro, M. Gramegna, M. Ajelli, and S. Merler. Age-specific sars-cov-2 infection fatality ratio and associated risk factors, italy, february to april 2020. *Eurosurveillance*, 25(31), 2020. **[impact factor: 6.454]**.

[4] G. Grasselli, A. Zangrillo, A. Zanella, M. Antonelli, L. Cabrini, A. Castelli, D. Cereda, A. Coluccello, G. Foti, R. Fumagalli, G. Iotti, N. Latronico, L. Lorini, S. Merler, G. Natalini, A. Piatti, M. V. Ranieri, A. M. Scandroglio, E. Storti, M. Cecconi, A. Pesenti, and COVID-19 Lombardy ICU Network. Baseline characteristics and outcomes of 1591 patients infected with sars-cov-2 admitted to icus of the lombardy region, italy. *JAMA*, 2020. **[impact factor: 51.273]**.

[5] G. Guzzetta, P. Poletti, M. Ajelli, F. Trentini, V. Marziano, D. Cereda, M. Tirani, G. Diurno, A. Bodina, A. Barone, L. Crottogini, M. Gramegna, A. Melegaro, and S. Merler. Potential

short-term outcome of an uncontrolled covid-19 epidemic in lombardy, italy, february to march 2020. *Eurosurveillance*, 25(12), 2020. **[impact factor: 7.421]**.

[6] M. Chinazzi, J. T. Davis, M. Ajelli, C. Gioannini, M. Litvinova, S. Merler, A. Pastore Y Piontti, K. Mu, L. Rossi, K. Sun, C. Viboud, X. Xiong, H. Yu, M. E. Halloran, I. M. Longini Jr, and A. Vespignani. The effect of travel restrictions on the spread of the 2019 novel coronavirus (covid-19) outbreak. *Science*, 368(6489):395–400, 2020. **[impact factor: 41.037]**.

[7] A. Aleta, D. Martín-Corral, A. Pastore Y Piontti, M. Ajelli, M. Litvinova, M. Chinazzi, N. E. Dean, M. E. Halloran, I. M. Longini Jr, S. Merler, A. Pentland, A. Vespignani, E. Moro, and Y. Moreno. Modelling the impact of testing, contact tracing and household quarantine on second waves of covid-19. *Nature human behaviour*, 2020. **[impact factor: 12.282]**.

[8] P. Stefanelli, A. Bella, G. Fedele, S. Pancheri, P. Leone, P. Vacca, A. Neri, A. Carannante, C. Fazio, E. Benedetti, S. Fiore, C. Fabiani, M. Simmaco, I. Santino, M. G. Zuccali, G. Bizzarri, R. Magnoni, P. P. Benetollo, S. Merler, S. Brusaferro, G. Rezza, and A. Ferro. Prevalence of sars-cov-2 igg antibodies in an area of north-eastern italy with a high incidence of covid-19 cases: a population-based study. *Clinical microbiology and infection*, 2020. **[impact factor: 7.117]**.

[9] S. Sarubbo, M. Tate, A. De Benedictis, S. Merler, S. Moritz-Gasser, G. Herbet, and H. Duffau. Mapping critical cortical hubs and white matter pathways by direct electrical stimulation: an original functional atlas of the human brain. *NeuroImage*, 205:116237, 2020. **[impact factor: 5.812]**.

[10] S. Sarubbo, M. Tate, A. De Benedictis, S. Merler, S. Moritz-Gasser, G. Herbet, and H. Duffau. A normalized dataset of 1821 cortical and subcortical functional responses collected during direct electrical stimulation in patients undergoing awake brain surgery. *Data in brief*, 28:104892, 2020.

[11] G. Guzzetta, F. Vairo, A. Mammone, S. Lanini, P. Poletti, M. Manica, R. Rosa, B. Caputo, A. Solimini, A. D. Torre, P. Scognamiglio, A. Zumla, G. Ippolito, and S. Merler. Spatial modes for transmission of chikungunya virus during a large chikungunya outbreak in italy: a modeling analysis. *BMC medicine*, 18(1):226, 2020. **[impact factor: 6.782]**.

[12] G. Guzzetta, F. Riccardo, V. Marziano, P. Poletti, F. Trentini, A. Bella, X. Andrianou, M. Del Manso, M. Fabiani, S. Bellino, S. Boros, A. M. Urdiales, M. F. Vescio, A. Piccioli, COVID-19 Working Group,, S. Brusaferro, G. Rezza, P. Pezzotti, M. Ajelli, and S. Merler. Impact of a nationwide lockdown on sars-cov-2 transmissibility, italy. *Emerging infectious diseases*, 27(1), 2020. **[impact factor: 6.259]**.

[13] Q.-H. Liu, A. I. Bento, K. Yang, H. Zhang, X. Yang, S. Merler, A. Vespignani, J. Lv, H. Yu, W. Zhang, T. Zhou, and M. Ajelli. The covid-19 outbreak in sichuan, china: Epidemiology and impact of interventions. *PLoS computational biology*, 16(12):e1008467, 2020. **[impact factor: 4.38]**.

[14] P. Bosetti, P. Poletti, M. Stella, B. Lepri, S. Merler, and M. De Domenico. Heterogeneity in social and epidemiological factors determines the risk of measles outbreaks. *Proceedings of the National Academy of Sciences of the United States of America*, 2020. **[impact factor: 9.421]**.

[15] G. E. Calabrò, M. L. Specchia, S. Boccalini, D. Panatto, C. Rizzo, S. Merler, A. M. Ferriero, M. L. Di Pietro, P. Bonanni, and C. de Waure. Strengthening the evidence-based approach to guiding effective influenza vaccination policies. *Vaccines*, 8(3), 2020. **[impact factor: 3.269]**.

[16] B. Caputo, G. Russo, M. Manica, F. Vairo, P. Poletti, G. Guzzetta, S. Merler, C. Scagnolari, and A. Solimini. A comparative analysis of the 2007 and 2017 italian chikungunya outbreaks and implication for public health response. *PLoS neglected tropical diseases*, 14(6):e0008159, 2020. **[impact factor: 3.885]**.

[17] G. Marini, D. Arnoldi, F. Baldacchino, G. Capelli, G. Guzzetta, S. Merler, F. Montarsi, A. Rizzoli, and R. Rosà. First report of the influence of temperature on the bionomics and population dynamics of aedes koreicus, a new invasive alien species in europe. *Parasites & vectors*, 12(1):524, 2019. **[impact factor: 3.031]**.

[18] V. Marziano, P. Poletti, F. Trentini, A. Melegaro, M. Ajelli, and S. Merler. Parental vaccination to reduce measles immunity gaps in Italy. *eLife*, 8:e44942, 2019. **[impact factor: 7.551]**.

[19] S. Lanini, J. P. A. Ioannidis, F. Vairo, M. Pletschette, G. Portella, V. Di Bari, A. Mammone, R. Pisapia, S. Merler, B. Nguhuni, M. Langer, A. Di Caro, S. J. L. Edwards, N. Petrosillo, A. Zumla, and G. Ippolito. Non-inferiority versus superiority trial design for new antibiotics in an era of high antimicrobial resistance: the case for post-marketing, adaptive randomised controlled trials. *The Lancet Infectious diseases*, 19(12):e444–e451, 2019. **[impact factor: 27.516]**.

[20] G. Guzzetta, C. Minosse, R. Pisapia, E. Giombini, A. Mammone, F. Vairo, A. R. Garbuglia, P. Scognamiglio, M. R. Capobianchi, S. Merler, G. Ippolito, and S. Lanini. Household transmission and disease transmissibility of a large HAV outbreak in Lazio, Italy, 2016-2017. *Epidemics*, page 100351, 2019. **[impact factor: 3.239]**.

[21] F. Di Ruscio, G. Guzzetta, J. V. Bjørnholt, T. M. Leegaard, A. E. F. Moen, S. Merler, and B. Freiesleben de Blasio. Quantifying the transmission dynamics of MRSA in the community and healthcare settings in a low-prevalence country. *Proceedings of the National*

Academy of Sciences of the United States of America, 116(29):14599–14605, 2019. **[impact factor: 9.580]**.

[22] F. Trentini, P. Poletti, A. Melegaro, and S. Merler. The introduction of 'No jab, No school' policy and the refinement of measles immunisation strategies in high-income countries. *BMC Medicine*, 17(1):86, 2019. **[impact factor: 8.285]**.

[23] G. Marini, G. Guzzetta, C. A. Marques Toledo, M. Teixeira, R. Rosà, and S. Merler. Effectiveness of Ultra-Low Volume insecticide spraying to prevent dengue in a non-endemic metropolitan area of Brazil. *PLoS Computational Biology*, 15(3):e1006831, 2019. **[impact factor: 4.428]**.

[24] M. Manica, G. Guzzetta, F. Filipponi, A. Solimini, B. Caputo, A. Della Torre, R. Rosà, and S. Merler. Assessing the risk of autochthonous yellow fever transmission in Lazio, central Italy. *PLoS Neglected Tropical Diseases*, 13(1):e0006970, 2019. **[impact factor: 4.487]**.

[25] Q.-H. Liu, M. Ajelli, A. Aleta, S. Merler, Y. Moreno, and A. Vespignani. Measurability of the epidemic reproduction number in data-driven contact networks. *Proceedings of the National Academy of Sciences of the United States of America*, 115(50):12680–12685, 2018. **[impact factor: 9.580]**.

[26] P. Poletti, S. Parlamento, T. Fayyisaa, R. Feyyiss, M. Lusiani, A. Tsegaye, G. Segafredo, G. Putoto, F. Manenti, and S. Merler. The hidden burden of measles in Ethiopia: how distance to hospital shapes the disease mortality rate. *BMC Medicine*, 16(1):177, 2018. **[impact factor: 8.285]**.

[27] K. Sun, Q. Zhang, A. Pastore-Piontti, M. Chinazzi, D. Mistry, N. E. Dean, D. P. Rojas, S. Merler, P. Poletti, L. Rossi, M. E. Halloran, I. M. Longini Jr, and A. Vespignani. Quantifying the risk of local Zika virus transmission in the contiguous US during the 2015-2016 ZIKV epidemic. *BMC Medicine*, 16(1):195, 2018. **[impact factor: 8.285]**.

[28] V. Marziano, P. Poletti, G. Béraud, P.-Y. Boëlle, S. Merler, and V. Colizza. Modeling the impact of changes in day-care contact patterns on the dynamics of varicella transmission in France between 1991 and 2015. *PLoS Computational Biology*, 14(8):e1006334, 2018. **[impact factor: 4.428]**.

[29] G. Guzzetta, C. A. Marques-Toledo, R. Rosà, M. Teixeira, and S. Merler. Quantifying the spatial spread of dengue in a non-endemic Brazilian metropolis via transmission chain reconstruction. *Nature Communications*, 9(1):2837, 2018. **[impact factor: 11.878]**.

[30] A. Melegaro, V. Marziano, E. Del Fava, P. Poletti, M. Tirani, C. Rizzo, and S. Merler. The impact of demographic changes, exogenous boosting and new vaccination policies on varicella and herpes zoster in Italy: a modelling and cost-effectiveness study. *BMC Medicine*, 16(1):117, 2018. **[impact factor: 8.285]**.

[31] M. Ajelli, Q. Zhang, K. Sun, S. Merler, L. Fumanelli, G. Chowell, L. Simonsen, C. Viboud, and A. Vespignani. The RAPIDD Ebola forecasting challenge: Model description and synthetic data generation. *Epidemics*, 22:3–12, 2018. **[impact factor: 3.239]**.

[32] C. Viboud, K. Sun, R. Gaffey, M. Ajelli, L. Fumanelli, S. Merler, Q. Zhang, G. Chowell, L. Simonsen, A. Vespignani, et al. The RAPIDD Ebola Forecasting Challenge: Synthesis and Lessons Learnt. *Epidemics*, 22:13–21, 2018. **[impact factor: 3.239]**.

[33] F. Trentini, P. Poletti, F. Baldacchino, A. Drago, F. Montarsi, G. Capelli, A. Rizzoli, R. Rosà, C. Rizzo, S. Merler, and A. Melegaro. The containment of potential outbreaks triggered by imported Chikungunya cases in Italy: a cost utility epidemiological assessment of vector control measures. *Scientific Reports*, 8(1):9034, 2018. **[impact factor: 4.011]**.

[34] S. Piffer, V. Bignamini, U. Rozzanigo, P. Poletti, S. Merler, E. Gremes, and D. M. Bonifati. Different Clinical Phenotypes of Embolic Stroke of Undetermined Source: A Subgroup Analysis of 86 Patients. *Journal of Stroke & Cerebrovascular Diseases*, 27(12):3578–3586, 2018. **[impact factor: 1.646]**.

[35] M. Manica, G. Guzzetta, P. Poletti, F. Filipponi, A. Solimini, B. Caputo, A. della Torre, R. Rosà, and S. Merler. Transmission dynamics of the ongoing chikungunya outbreak in Central Italy: from coastal areas to the metropolitan city of Rome, summer 2017. *Eurosurveillance*, 22(44):pii=17–00685, 2017. **[impact factor: 7.127]**.

[36] V. Marziano, A. Pugliese, S. Merler, and M. Ajelli. Detecting a Surprisingly Low Transmission Distance in the Early Phase of the 2009 Influenza Pandemic. *Scientific Reports*, 7(1):12324, 2017. **[impact factor: 4.122]**.

[37] G. Marini, G. Guzzetta, R. Rosà, and S. Merler. First outbreak of Zika virus in the continental United States: a modelling analysis. *Eurosurveillance*, 22(37):pii=30612, 2017. **[impact factor: 7.127]**.

[38] G. Guzzetta, F. Trentini, P. Poletti, F. A. Baldacchino, F. Montarsi, G. Capelli, A. Rizzoli, R. Rosà, S. Merler, and A. Melegaro. Effectiveness and economic assessment of routine larviciding for prevention of chikungunya and dengue in temperate urban settings in Europe. *PLoS Neglected Tropical Diseases*, 11(9):e0005918, 2017. **[impact factor: 4.367]**.

[39] F. Trentini, P. Poletti, S. Merler, and A. Melegaro. Measles immunity gaps and the progress towards elimination: a multi-country modelling analysis. *The Lancet Infectious Diseases*, 17(10):1089–1097, 2017. **[impact factor: 25.148]**.

[40] P. Poletti, R. Visintainer, B. Lepri, and S. Merler. The interplay between individual social behavior and clinical symptoms in small clustered groups. *BMC Infectious Diseases*, 17(1):521, 2017. **[impact factor: 2.620]**.

[41] Q. Zhang, K. Sun, M. Chinazzi, A. Pastore Y Piontti, N. E. Dean, D. P. Rojas, S. Merler, D. Mistry, P. Poletti, L. Rossi, M. Bray, M. E. Halloran, I. M. Longini Jr, and A. Vespignani. Spread of Zika virus in the Americas. *Proceedings of the National Academy of Sciences of the United States of America*, 114(22):E4334–E4343, 2017. **[impact factor: 9.504]**.

[42] M. Dallabona, S. Sarubbo, S. Merler, F. Corsini, G. Pulcrano, U. Rozzanigo, M. Barbareschi, and F. Chioffi. Impact of mass effect, tumor location, age, and surgery on the cognitive outcome of patients with high-grade gliomas: a longitudinal study. *Neuro-Oncology Practice*, 4(4):229–240, 2017.

[43] A. Melegaro, E. Del Fava, P. Poletti, S. Merler, C. Nyamukapa, J. Williams, S. Gregson, and P. Manfredi. Social Contact Structures and Time Use Patterns in the Manicaland Province of Zimbabwe. *PloS One*, 12(1):e0170459, 2017. **[impact factor: 2.766]**.

[44] G. Guzzetta, V. Tagliapietra, S. E. Perkins, H. C. Hauffe, P. Poletti, S. Merler, and A. Rizzoli. Population dynamics of wild rodents induce stochastic fadeouts of a zoonotic pathogen. *Journal of Animal Ecology*, 86(3):451–459, 2017. **[impact factor: 4.459]**.

[45] G. Marini, G. Guzzetta, F. Baldacchino, D. Arnoldi, F. Montarsi, G. Capelli, A. Rizzoli, S. Merler, and R. Rosà. The effect of interspecific competition on the temporal dynamics of Aedes albopictus and Culex pipiens. *Parasites & Vectors*, 10(1):102, 2017. **[impact factor: 3.163]**.

[46] G. Chowell, C. Viboud, L. Simonsen, S. Merler, and A. Vespignani. Perspectives on model forecasts of the 2014-2015 Ebola epidemic in West Africa: lessons and the way forward. *BMC Medicine*, 15(1):42, 2017. **[impact factor: 9.088]**.

[47] G. Guzzetta, F. Montarsi, F. A. Baldacchino, M. Metz, G. Capelli, A. Rizzoli, A. Pugliese, R. Rosà, P. Poletti, and S. Merler. Potential Risk of Dengue and Chikungunya Outbreaks in Northern Italy Based on a Population Model of Aedes albopictus (Diptera: Culicidae). *PLoS Neglected Tropical Diseases*, 10(6):e0004762, 2016. **[impact factor: 3.834]**.

[48] G. Guzzetta, P. Poletti, F. Montarsi, F. Baldacchino, G. Capelli, A. Rizzoli, R. Rosà, and S. Merler. Assessing the potential risk of Zika virus epidemics in temperate areas with established Aedes albopictus populations. *Eurosurveillance*, 21(15):pii=30199, 2016. **[impact factor: 7.202]**.

[49] S. Sarubbo, A. De Benedictis, S. Merler, E. Mandonnet, M. Barbareschi, M. Dallabona, F. Chioffi, and H. Duffau. Structural and functional integration between dorsal and ventral language streams as revealed by blunt dissection and direct electrical stimulation. *Human Brain Mapping*, 37(11):3858–3872, 2016. **[impact factor: 4.53]**.

[50] G. Guzzetta, P. Poletti, S. Merler, and P. Manfredi. The Epidemiology of Herpes Zoster After Varicella Immunization Under Different Biological Hypotheses: Perspectives From

Mathematical Modeling. *American Journal of Epidemiology*, 183(8):765–73, 2016. **[impact factor: 4.825]**.

[51] L. Fumanelli, M. Ajelli, S. Merler, N. M. Ferguson, and S. Cauchemez. Model-Based Comprehensive Analysis of School Closure Policies for Mitigating Influenza Epidemics and Pandemics. *PLoS Computational Biology*, 12(1):e1004681, 2016. **[impact factor: 4.542]**.

[52] S. Merler, M. Ajelli, L. Fumanelli, S. Parlamento, A. Pastore Y Piontti, N. E. Dean, G. Putoto, D. Carraro, I. M. Longini Jr, M. E. Halloran, and A. Vespignani. Containing Ebola at the Source with Ring Vaccination. *PLoS Neglected Tropical Diseases*, 10(11):e0005093, 2016. **[impact factor: 3.834]**.

[53] C. Ciavarella, L. Fumanelli, S. Merler, C. Cattuto, and M. Ajelli. School closure policies at municipality level for mitigating influenza spread: a model-based evaluation. *BMC Infectious Diseases*, 16(1):576, 2016. **[impact factor: 2.768]**.

[54] M. Ajelli, S. Merler, L. Fumanelli, A. Pastore Y Piontti, N. E. Dean, I. M. Longini Jr, M. E. Halloran, and A. Vespignani. Spatiotemporal dynamics of the Ebola epidemic in Guinea and implications for vaccination and disease elimination: a computational modeling analysis. *BMC Medicine*, 14(1):130, 2016. **[impact factor: 8.097]**.

[55] S. Merler. Effects of clustered transmission on epidemic growth Comment on "Mathematical models to characterize early epidemic growth: A review" by Gerardo Chowell et al. *Physics of Life Reviews*, 18:112–113, 2016. **[impact factor: 13.84]**.

[56] G. Marini, P. Poletti, M. Giacobini, A. Pugliese, S. Merler, and R. Rosà. The Role of Climatic and Density Dependent Factors in Shaping Mosquito Population Dynamics: The Case of Culex pipiens in Northwestern Italy. *PloS One*, 11(4):e0154018, 2016. **[impact factor: 2.806]**.

[57] G. Guzzetta, M. Ajelli, Z. Yang, L. N. Mukasa, N. Patil, J. H. Bates, D. E. Kirschner, and S. Merler. Effectiveness of contact investigations for tuberculosis control in Arkansas. *Journal of Theoretical Biology*, 380:238–246, 2015. **[impact factor: 2.049]**.

[58] S. Sarubbo, A. De Benedictis, S. Merler, E. Mandonnet, S. Balbi, E. Granieri, and H. Duffau. Towards a functional atlas of human white matter. *Human Brain Mapping*, 36(8):3117–3136, 2015. **[impact factor: 4.962]**.

[59] P. Poletti, S. Merler, M. Ajelli, P. Manfredi, P. K. Munywoki, D. Nokes, and A. Melegaro. Evaluating vaccination strategies for reducing infant respiratory syncytial virus infection in low-income settings. *BMC Medicine*, 13:49, 2015. **[impact factor: 8.005]**.

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