CURRICULUM VITAE

Stefano Merler

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Contents

Education and positions

Jan 1, 2021 - present: director of the FBK (Bruno Kessler Foundation) Center for Health Emergencies, Trento, Italy.

Jan 1, 2013 - Dec 31, 2020: head of the DPCS (Dynamical Processes in Complex Societies) Research Unit at FBK, Trento, Italy.

Mar 1, 2008 - Dec 31, 2012: member of the MPBA (Predictive Models for Biology and Environment) Research Unit at FBK, Trento, Italy.

Mar 1, 2008 - present: senior researcher at FBK, Trento, Italy (tenured position since March 1st, 2008).

Oct 18, 1999 - Feb 29, 2008: researcher at the Istituto Trentino di Cultura – Institute for the Scientific and Technological Research (ITC-IRST), Trento, Italy (tenured position since January 7th, 2004).

Jul 1, 1996 - Oct 17, 1999: fellowship, Center of Alpine Ecology, Italy.

Jan 1, 1995 - Jun 30, 1996: fellowship, ITC-IRST, Italy.

Sep 23,1994: Master's Degree in Mathematics, University of Trento, Italy.

Research

Research interests and areas of expertise:

- epidemiology of infectious diseases, e.g. estimates of key time periods, transmissibility, susceptibility, clinical progression, risk factors;
- statistical, mathematical and computational modelling of infectious diseases transmission;
- evaluation of the effectiveness of intervention measures.

Research on infectious diseases including:

- emerging infectious diseases (influenza, SARS-CoV-2);
- vector-borne diseases (chikungunya, yellow fever, Zika, dengue, West Nile);
- childhood diseases (measles, chickenpox – herpes zoster, respiratory syncytial virus);
- filoviruses (Zaire and Sudan ebolavirues, Marburg);

- sexually transmitted diseases (mpox);
- antimicrobial resistance (Methicillin-resistant Staphylococcus aureus);
- foodborne diseases [and person-to-person] (hepatitis A, norovirus);
- meningococcal disease, tuberculosis.

Bibibliometric indicators

- Author of 195 scientific publications, including 175 academic papers and 20 conference proceedings and book chapters.
- Cumulative JCR Impact Factor by year of publication (IF): 1,315.0; average IF per academic paper: 7.5.
- 91.9% of publications appeared in journals ranked in the top 25% journals by CiteScore (Scopus).
- 67.9% of publications are among the top 25% most cited worldwide (Scopus).
- Total citations: 15,517 (Scopus); 29,686 (Google Scholar).
- H-index: 50 (Scopus); 65 (Google Scholar).
- In prominent position (first, last, co-last or corresponding author) in 95 out 195 research papers (48.7%).

Research network

- The number of distinct co-authors is 801 (Scopus).
- 68.8% of publications involve international collaborations (Scopus).

Publications

Underlining indicates prominent author position (first, last, co-last, or corresponding author)

[1] V. Marziano, A. Bella, F. Menegale, M. Del Manso, D. Petrone, A. T. Palamara, P. Pezzotti, **S. Merler**, A. Filia, and P. Poletti. Estimating measles susceptibility and transmission patterns in Italy: an epidemiological assessment. *The Lancet Infectious Diseases*, pages S1473–3099(25)00293–2, 2025.

[2] F. Menegale, M. Manica, M. Del Manso, A. Bella, A. Zardini, A. Gobbi, A. D. Mignuoli, G. Mattei, F. Vairo, L. Vezzosi, F. Russo, F. Ferraro, F. Maraglino, A. T. Palamara, Dengue risk assessment working group, P. Poletti, P. Pezzotti, **S. Merler**, and F. Riccardo. Risk assessment and perspectives of local transmission of chikungunya and dengue in Italy, a European forerunner. *Nature Communications*, 16(1):6237, 2025.

[3] P. Cattaneo, E. Salvador, M. Manica, L. Barzon, C. Castilletti, F. Di Gennaro, R. Huits, **S. Merler**, P. Poletti, F. Riccardo, A. Saracino, F. Segala, L. Zammarchi, D. Buonfrate, and F. Gobbi. Transmission of autochthonous Aedes-borne arboviruses and related public health challenges in Europe 2007–2023: a systematic review and secondary analysis. *The Lancet Regional Health – Europe*, 51:101231, 2025.

[4] F. Menegale, L. Vezzosi, M. Tirani, S. Scarioni, S. Odelli, F. Morani, C. Borriello, E. Pariani, I. Dorigatti, D. Cereda, **S. Merler**, and P. Poletti. Impact of routine prophylaxis with monoclonal antibodies and maternal immunisation to prevent respiratory syncytial virus hospitalisations, Lombardy region, Italy, 2024/25 season. *Eurosurveillance*, 30(14):2400637, 2025.

[5] A. De Bellis, A. Bizzotto, L. Anagnostopoulou Mph, L. Kourentis Mph, V. Marziano, V. Mouchtouri, **S. Merler**, and G. Guzzetta. Mitigating norovirus spread on cruise ships: A model-based assessment of diagnostic timing and isolation. *Journal of Travel Medicine*, page taaf059, 2025.

[6] C. Virgillito, E. Longo, C. M. De Marco, C. Gentile, M. Micocci, C. Topalidis, L. Violante, F. Filipponi, P. Poletti, **S. Merler**, A. Della Torre, B. Caputo, and M. Manica. Cross-sectional entomological data reveals an increased risk of arboviral transmission in a year of record-breaking heat in Southern Europe. *Communications Medicine*, 5(1):307, 2025.

[7] A. Bizzotto, A. De Bellis, V. Marziano, V. A. Mouchtouri, L. Kourentis, L. Anagnostopoulos, C. Hadjichristodoulou, **S. Merler**, and G. Guzzetta. Forecasting norovirus cases on cruise ships to support outbreak management on board. *Travel Medicine and Infectious Disease*, 65:102850, 2025.

[8] F. Rovida, M. Faccini, C. M. Grané, I. Cassaniti, S. Senatore, E. Rossetti, G. Scardina, M. Piazza, G. Campanini, D. Lilleri, S. Paolucci, G. Ferrari, A. Piralla, F. Defilippo, D. Lelli, A. Moreno, L. Vezzosi, F. Attanasi, S. Marzia, B. Manuela, L. Cerutti, S. Paglia, A. Regazzetti, M. Marcacci, G. Di Donato, M. Farioli, M. Manica, P. Poletti, A. Lavazza, M. Bonini, **S. Merler**, F. Baldanti, D. Cereda, and Lombardy Dengue network. The 2023 Dengue Outbreak in Lombardy, Italy: A One-Health Perspective. *Travel Medicine and Infectious Disease*, 64:102795, 2025.

[9] G. Matusali, M. Manica, A. D'Abramo, F. Carletti, G. Maffongelli, F. Colavita, P. Poletti, E. Lalle, G. Sberna, E. Specchiarello, L. Bordi, S. Meschi, G. De Carli, M. Spaziante,

A. Corpolongo, E. Girardi, **S. Merler**, F. Vairo, E. Nicastri, F. Maggi, and Study Group on Arboviruses. Dengue Virus Dynamic and Persistence in Body Fluids of Infected Patients in Italy, 2018-2023. *Journal of Medical Virology*, 97(4):e70322, 2025.

[10] M. Ajelli, J.-J. Muyembe, A. Touré, A. Diallo, M. Litvinova, **S. Merler**, S. Mulangu, A. Bagayoko, A. Bah, I. Bah, A. Barry, F. Barry, M. Chérif, D. Condé, A. A. Diallo, F. Diallo, M. Diakité, K. Doré, K. A. Mapan, T. Koundouno, P. K. Onivogui, F. Lamah, H. Maneno, A. Nomou, K. Sekouba, I. Sani, A. Soumah, M. M. Sy, P.-S. Gsell, M. E. Halloran, A. M. Henao-Restrepo, I. S. Fall, M. J. Ryan, P. Salama, A. Vespignani, and I. M. Longini Jr. Vaccination Strategies for Ebola in the Democratic Republic of Congo: The WHO-Ebola Modeling Collaboration. *International Journal of Infectious Diseases*, 153:107779, 2025.

[11] I. Bianconi, M. Manica, E. Moroder, G. Guzzetta, **S. Merler**, P. Poletti, and E. Pagani. Tracking Seasonal Influenza Trends in South Tyrol During 2022/2023 Using Genomic Surveillance Data. *Influenza and Other Respiratory Viruses*, 19(4):e70083, 2025.

[12] R. D. Harp, K. M. Holcomb, R. Retkute, A. Prusokiene, A. Prusokas, Z. Ertem, M. Ajelli, A. G. Kummer, M. Litvinova, **S. Merler**, A. P. Y. Piontti, P. Poletti, A. Vespignani, A. B. B. Wilke, A. Zardini, K. H. Smith, P. Armstrong, N. DeFelice, A. Keyel, J. Shepard, R. Smith, A. Tyre, J. Humphreys, L. W. Cohnstaedt, S. Hosseini, C. Scoglio, M. E. Gorris, M. Barnard, S. K. Moser, J. A. Spencer, M. S. J. McCarter, C. Lee, M. S. Nolan, C. M. Barker, J. E. Staples, R. J. Nett, and M. A. Johansson. Evaluation of the 2022 West Nile virus forecasting challenge, USA. *Parasites & Vectors*, 18(1):152, 2025.

[13] S. Fiandrino, A. Bizzotto, G. Guzzetta, **S. Merler**, F. Baldo, E. Valdano, A. M. Urdiales, A. Bella, F. Celino, L. Zino, A. Rizzo, Y. Li, N. Perra, C. Gioannini, P. Milano, D. Paolotti, M. Quaggiotto, L. Rossi, I. Vismara, A. Vespignani, and N. Gozzi. Collaborative forecasting of influenza-like illness in Italy: The Influcast experience. *Epidemics*, 50:100819, 2025.

[14] A. Zardini, F. Menegale, A. Gobbi, M. Manica, G. Guzzetta, V. d'Andrea, V. Marziano, F. Trentini, F. Montarsi, B. Caputo, A. Solimini, C. Marques-Toledo, A. B. B. Wilke, R. Rosà, G. Marini, D. Arnoldi, A. Pastore Y Piontti, A. Pugliese, G. Capelli, A. Della Torre, M. M. Teixeira, J. C. Beier, A. Rizzoli, A. Vespignani, M. Ajelli, **S. Merler**, and P. Poletti. Estimating the potential risk of transmission of arboviruses in the Americas and Europe: a modelling study. *The Lancet Planetary Health*, 8(1):e30–e40, 2024.

[15] G. Guzzetta, V. Marziano, A. Mammone, A. Siddu, F. Ferraro, A. Caraglia, F. Maraglino, G. Rezza, A. Vespignani, I. Longini, M. Ajelli, and **S. Merler**. The decline of the 2022 Italian mpox epidemic: Role of behavior changes and control strategies. *Nature Communications*, 15(1):2283, 2024.

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D. Morelli, L. Sebastianelli, M. Marcacci, F. Ferraro, M. Di Luca, I. Pascucci, C. Merakou, A. Duranti, I. Pati, L. Lombardini, D. Fiacchini, G. Filipponi, F. Maraglino, A. T. Palamara, P. Poletti, P. Pezzotti, F. Filippetti, **S. Merler**, M. Del Manso, S. Menzo, and Marche dengue outbreak group. Autochthonous dengue outbreak in Marche Region, Central Italy, August to October 2024. *Eurosurveillance*, 29(47):2400713, 2024.

[17] V. Marziano, G. Guzzetta, I. Longini, and **S. Merler**. Epidemiologic Quantities for Monkeypox Virus Clade I from Historical Data with Implications for Current Outbreaks, Democratic Republic of the Congo. *Emerging Infectious Diseases*, 30(10):2042–2046, 2024.

[18] C. Sacco, M. Manica, V. Marziano, M. Fabiani, A. Mateo-Urdiales, G. Guzzetta, **S. Merler**, and P. Pezzotti. The impact of underreported infections on vaccine effectiveness estimates derived from retrospective cohort studies. *International Journal of Epidemiology*, 53(3):dyae077, 2024.

[19] A. Bizzotto, G. Guzzetta, V. Marziano, M. Del Manso, A. Mateo Urdiales, D. Petrone, A. Cannone, C. Sacco, P. Poletti, M. Manica, A. Zardini, F. Trentini, M. Fabiani, A. Bella, F. Riccardo, P. Pezzotti, M. Ajelli, and **S. Merler**. Increasing situational awareness through nowcasting of the reproduction number. *Frontiers in Public Health*, 12:1430920, 2024.

[20] V. d'Andrea, F. Trentini, V. Marziano, A. Zardini, M. Manica, G. Guzzetta, M. Ajelli, D. Petrone, M. Del Manso, C. Sacco, X. Andrianou, A. Bella, F. Riccardo, P. Pezzotti, P. Poletti, and **S. Merler**. Spatial spread of COVID-19 during the early pandemic phase in Italy. *BMC Infectious Diseases*, 24(1):450, 2024.

[21] F. Menegale, M. Manica, A. Zardini, G. Guzzetta, V. Marziano, V. d'Andrea, F. Trentini, M. Ajelli, P. Poletti, and **S. Merler**. Evaluation of Waning of SARS-CoV-2 Vaccine-Induced Immunity: A Systematic Review and Meta-analysis. *JAMA Network Open*, 6(5):e2310650, 2023.

[22] G. Guzzetta, M. Ajelli, A. Miglietta, C. Fazio, A. Neri, **S. Merler**, G. Rezza, and P. Stefanelli. Evaluating the effect of targeted strategies as control tools for hypervirulent meningococcal C outbreaks: a case study from Tuscany, Italy, 2015 to 2016. *Eurosurveillance*, 28(19):pii=2200650, 2023.

[23] H. J. Ang, F. Menegale, G. Preziosi, E. Pariani, M. Migliari, L. Pellegrinelli, G. M. Sechi, S. Buoro, **S. Merler**, D. Cereda, M. Tirani, P. Poletti, and I. Dorigatti. Reconstructing the impact of COVID-19 on the immunity gap and transmission of respiratory syncytial virus in Lombardy, Italy. *eBioMedicine*, 95:104745, 2023.

[24] V. Marziano, G. Guzzetta, I. Longini, and **S. Merler**. Estimates of Serial Interval and Reproduction Number of Sudan Virus, Uganda, August-November 2022. *Emerging Infectious Diseases*, 29(7):1429–1432, 2023.

[25] G. Fedele, I. Schiavoni, F. Trentini, P. Leone, E. Olivetta, A. Fallucca, S. Fiore, A. Di Martino, S. Abrignani, V. Baldo, T. Baldovin, A. Bandera, P. Clerici, M. De Paschale, F. Diaco, A. Domnich, F. Fortunato, I. Giberti, A. Gori, R. Grifantini, T. Lazzarotto, V. Lodi, C. M. Mastroianni, R. Prato, V. Restivo, F. Vitale, S. Brusaferro, **S. Merler**, A. T. Palamara, P. Stefanelli, and Study Group for the Immunological Monitoring post Covid19 vaccination. A 12-month follow-up of the immune response to SARS-CoV-2 primary vaccination: evidence from a real-world study. *Frontiers in Immunology*, 14:1272119, 2023.

[26] V. Marziano, G. Guzzetta, F. Menegale, C. Sacco, D. Petrone, A. Mateo Urdiales, M. Del Manso, A. Bella, M. Fabiani, M. F. Vescio, F. Riccardo, P. Poletti, M. Manica, A. Zardini, V. d'Andrea, F. Trentini, P. Stefanelli, G. Rezza, A. T. Palamara, S. Brusaferro, M. Ajelli, P. Pezzotti, and **S. Merler**. Estimating SARS-CoV-2 infections and associated changes in COVID-19 severity and fatality. *Influenza and Other Respiratory Viruses*, 17(8):e13181, 2023.

[27] M. Manica, P. Poletti, S. Deandrea, G. Mosconi, C. Ancarani, S. Lodola, G. Guzzetta, V. d'Andrea, V. Marziano, A. Zardini, F. Trentini, A. Odone, M. Tirani, M. Ajelli, and **S. Merler**. Estimating SARS-CoV-2 transmission in educational settings: A retrospective cohort study. *Influenza and Other Respiratory Viruses*, 17:e13049, 2023.

[28] M. Galli, A. Zardini, W. N. Gamshie, S. Santini, A. Tsegaye, F. Trentini, V. Marziano, G. Guzzetta, M. Manica, V. d'Andrea, G. Putoto, F. Manenti, M. Ajelli, P. Poletti, and **S. Merler**. Priority age targets for COVID-19 vaccination in Ethiopia under limited vaccine supply. *Scientific Reports*, 13(1):5586, 2023.

[29] M. Manica, G. Marini, A. Solimini, G. Guzzetta, P. Poletti, P. Scognamiglio, C. Virgillito, A. Della Torre, **S. Merler**, R. Rosà, F. Vairo, and B. Caputo. Reporting delays of chikungunya cases during the 2017 outbreak in Lazio region, Italy. *PLoS Neglected Tropical Diseases*, 17(9):e0011610, 2023.

[30] C. Molina Grané, P. Mancuso, M. Vicentini, F. Venturelli, O. Djuric, M. Manica, G. Guzzetta, V. Marziano, A. Zardini, V. d'Andrea, F. Trentini, E. Bisaccia, E. Larosa, S. Cilloni, M. T. Cassinadri, P. Pezzotti, M. Ajelli, P. G. Rossi, **S. Merler**, and P. Poletti. SARS-CoV-2 transmission patterns in educational settings during the Alpha wave in Reggio-Emilia, Italy. *Epidemics*, 44:100712, 2023.

[31] M. Manica, M. Litvinova, A. De Bellis, G. Guzzetta, P. Mancuso, M. Vicentini, F. Venturelli, E. Bisaccia, A. I. Bento, P. Poletti, V. Marziano, A. Zardini, V. d'Andrea, F. Trentini, A. Bella, F. Riccardo, P. Pezzotti, M. Ajelli, P. Giorgi Rossi, **S. Merler**, and Reggio Emilia COVID-19 Working Group. Estimation of the incubation period and generation time of SARS-CoV-2 Alpha and Delta variants from contact tracing data. *Epidemiology & Infection*, 151:e5, 2023.

[32] A. B. B. Wilke, D. Damian, M. Litvinova, T. Byrne, A. Zardini, P. Poletti, **S. Merler**, J.-P. Mutebi, J. Townsend, and M. Ajelli. Spatiotemporal distribution of vector mosquito species and areas at risk for arbovirus transmission in Maricopa County, Arizona. *Acta Tropica*, 240:106833, 2023.

[33] M. Manica, A. De Bellis, G. Guzzetta, P. Mancuso, M. Vicentini, F. Venturelli, A. Zerbini, E. Bisaccia, M. Litvinova, F. Menegale, C. Molina Grané, P. Poletti, V. Marziano, A. Zardini, V. d'Andrea, F. Trentini, A. Bella, F. Riccardo, P. Pezzotti, M. Ajelli, P. Giorgi Rossi, **S. Merler**, and Reggio Emilia COVID-19 Working Group. Intrinsic generation time of the SARS-CoV-2 Omicron variant: An observational study of household transmission. *The Lancet Regional Health – Europe*, 19:100446, 2022.

[34] P. Stefanelli, F. Trentini, D. Petrone, A. Mammone, L. Ambrosio, M. Manica, G. Guzzetta, V. d'Andrea, V. Marziano, A. Zardini, C. Molina Grane', M. Ajelli, A. Di Martino, F. Riccardo, A. Bella, M. Sane Schepisi, F. Maraglino, P. Poletti, A. T. Palamara, S. Brusaferro, G. Rezza, P. Pezzotti, **S. Merler**, Genomic SARS–CoV–2 National Surveillance Working Group, and Italian Integrated Surveillance of COVID–19 Study Group. Tracking the progressive spread of the SARS-CoV-2 Omicron variant in Italy, December 2021 to January 2022. *Eurosurveillance*, 27(45):pii=2200125, 2022.

[35] P. Stefanelli, F. Trentini, G. Guzzetta, V. Marziano, A. Mammone, M. Sane Schepisi, P. Poletti, C. Molina Grané, M. Manica, M. Del Manso, X. Andrianou, M. Ajelli, G. Rezza, S. Brusaferro, **S. Merler**, and COVID-19 National Microbiology Surveillance Study Group. Co-circulation of SARS-CoV-2 Alpha and Gamma variants in Italy, February and March 2021. *Eurosurveillance*, 27(5):pii=2100429, 2022.

[36] Q.-H. Liu, J. Zhang, C. Peng, M. Litvinova, S. Huang, P. Poletti, F. Trentini, G. Guzzetta, V. Marziano, T. Zhou, C. Viboud, A. I. Bento, J. Lv, A. Vespignani, **S. Merler**, H. Yu, and M. Ajelli. Model-based evaluation of alternative reactive class closure strategies against COVID-19. *Nature Communications*, 13(1):322, 2022.

[37] G. Guzzetta, A. Mammone, F. Ferraro, A. Caraglia, A. Rapiti, V. Marziano, P. Poletti, D. Cereda, F. Vairo, G. Mattei, F. Maraglino, G. Rezza, and **S. Merler**. Early Estimates of Monkeypox Incubation Period, Generation Time, and Reproduction Number, Italy, May-June 2022. *Emerging Infectious Diseases*, 28(10), 2022.

[38] M. Manica, S. Pancheri, P. Poletti, G. Giovanazzi, G. Guzzetta, F. Trentini, V. Marziano, M. Ajelli, M. G. Zuccali, P. P. Benetollo, **S. Merler**, and A. Ferro. The risk of symptomatic infection during a second COVID-19 wave, in SARS-CoV-2 seropositive individuals. *Clinical Infectious Diseases*, 74(5):893–896, 2022.

[39] F. Riccardo, G. Guzzetta, A. M. Urdiales, M. Del Manso, X. D. Andrianou, A. Bella, P. Pezzotti, S. Carbone, T. De Vito, F. Maraglino, V. Demicheli, C. Dario, E. Coscioni, G. Rezza,

A. Urbani, **S. Merler**, S. Brusaferro, and Italian COVID-19 monitoring group. COVID-19 response: effectiveness of weekly rapid risk assessments, Italy. *Bulletin of the World Health Organization*, 100(2):161–167, 2022.

[40] G. Fedele, F. Trentini, I. Schiavoni, S. Abrignani, G. Antonelli, V. Baldo, T. Baldovin, A. Bandera, F. Bonura, P. Clerici, M. De Paschale, F. Fortunato, A. Gori, R. Grifantini, G. Icardi, T. Lazzarotto, V. Lodi, C. M. Mastroianni, A. Orsi, R. Prato, V. Restivo, R. Carsetti, E. Piano Mortari, P. Leone, E. Olivetta, S. Fiore, A. Di Martino, S. Brusaferro, **S. Merler**, A. T. Palamara, P. Stefanelli, and the Study Group for the Immunological Monitoring post Covid- 19 vaccination. Evaluation of humoral and cellular response to four vaccines against COVID-19 in different age groups: a longitudinal study. *Frontiers in Immunology*, 13:1021396, 2022.

[41] F. Trentini, V. Marziano, G. Guzzetta, M. Tirani, D. Cereda, P. Poletti, R. Piccarreta, A. Barone, G. Preziosi, F. Arduini, P. G. D. Valle, A. Zanella, F. Grosso, G. Castillo, A. Castrofino, G. Grasselli, A. Melegaro, A. Piatti, A. Andreassi, M. Gramegna, M. Ajelli, and **S. Merler**. The pressure on healthcare system and intensive care utilization during the COVID-19 outbreak in the Lombardy region: a retrospective observational study on 43,538 hospitalized patients. *American Journal of Epidemiology*, 191(1):137–146, 2022.

[42] P. F. Caruso, G. Angelotti, M. Greco, G. Guzzetta, D. Cereda, **S. Merler**, and M. Cecconi. Early prediction of SARS-CoV-2 reproductive number from environmental, atmospheric and mobility data: A supervised machine learning approach. *International Journal of Medical Informatics*, 162:104755, 2022.

[43] F. Trentini, E. Pariani, A. Bella, G. Diurno, L. Crottogini, C. Rizzo, **S. Merler**, and M. Ajelli. Characterizing the transmission patterns of seasonal influenza in Italy: lessons from the last decade. *BMC Public Health*, 22(1):19, 2022.

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[46] S. Marchetti, A. Borin, F. P. Conteduca, G. Ilardi, G. Guzzetta, P. Poletti, P. Pezzotti, A. Bella, P. Stefanelli, F. Riccardo, **S. Merler**, A. Brandolini, and S. Brusaferro. An epidemic model for SARS-CoV-2 with self-adaptive containment measures. *PLoS One*, 17(7):e0272009, 2022.

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Research team leadership

Jan 1, 2021 - present: research is conducted at the FBK Center for Health Emergencies (HE), directed by Stefano Merler. Established on January 1st, 2021, the HE Center builds on the experience of the DPCS Research Unit at FBK, which operated from 2013 to 2020. The Center focuses on both basic and applied scientific research in the interdisciplinary field of human infectious disease epidemiology. As of 2025, the HE Center comprises 5

senior researchers, 9 postdoctoral researchers, and 5 PhD students. Between 2021 and 2025, the Center's annual budget ranged from €600,000 and €1,100,000.

Other/past research team leadership roles

Sep 23, 2022 - present: co-head of the FBK-UNITN (University of Trento) Joint Laboratory EPIMAT.

Apr 15, 2021 - present: co-head of the FBK-ISS (Istituto Superiore di Sanità) Joint Laboratory EPIQ.

Feb 5, 2018 - Feb 4, 2023: co-head of the FBK-FEM (Edmund Mach Foundation) Joint Research Unit EPILAB.

Jan 1, 2013 - Dec 31, 2020: head of the DPCS (Dynamical Processes in Complex Societies) Research Unit at FBK.

Bibliometric indicators

- Since 2013, research groups led by Stefano Merler, including his own work, have published 186 academic papers.
- Cumulative JCR Impact Factor by year of publication (IF): 1,464.2; average IF per academic paper: 7.9.
- Publications in academic journals with IF larger than 20: Nature, JAMA, Science (2), The Lancet Infectious Diseases (6), Nature Human Behaviour, The Lancet Planetary Health, The Lancet Regional Health – Europe.
- According to Scopus metrics for 2024, 110 academic papers (59.1%) were published in journals ranked within the top 10th percentile, while 171 academic papers (91.9%) appeared in journals within the top 25th percentile.

Research projects

- As Principal Investigator, Stefano Merler has secured research funding totaling €4,782,023.
- In total, research groups under Stefano Merler's direction have received €6,224,547 in funding.

International and national research projects, admitted to funding on the basis of competitive calls that include peer review

[1] REACH-OUT – Closing the immunization gap by reaching zero-dose children through improved equitable and cost-effective vaccine delivery strategies.
Call: HORIZON-JU-GH-EDCTP3-2023-02-two-stage: Research and Innovation actions supporting the global health EDCTP3 Joint Undertaking.
Period: Jan 1, 2025 - present.
Funding: €418,625.
Role: Team leader.

[2] EU-WISH – Wastewater Integrated Surveillance for Public Health.
Call: EU4H-2022-DGA-MS-IBA-01-01: enhance and/or improve national public health WGS and/or RT-PCR capacity.
Period: Apr 13, 2023 - present.
Funding: €120,000.
Role: Team leader.

[3] SeCOV – Enhancing Whole Genome Sequencing (WGS), national infrastructures and capacities to respond to the Covid-19 pandemic in Italy.
Call: EU4H-2022-DGA-MS-IBA-01-01: enhance and/or improve national public health WGS and/or RT-PCR capacity.
Period: Oct 1, 2022 - present.
Funding: €183,899.
Role: Team leader.

[4] INF-ACT – One Health Basic and Translational Research Actions addressing Unmet Needs on Emerging Infectious Diseases.
Call: Partenariati estesi nell'ambito del PNRR, Missione 4 – Componente 2 – Investimento 1.3, finanziato dall'Unione Europea – NextGenerationEU.
Period: Nov 1, 2022 - present.
Funding: €1,520,000.
Role: Principal Investigator, Co-Leader Node 4 on Epidemiology, monitoring and modelling (EPI-MOD).

[5] HEALTHY SAILING – Prevention, mitigation, management of infectious diseases on cruise ships and passenger ferries.
Call: HORIZON-CL5-2021-D6-01: Safe, Resilient Transport and Smart Mobility services for passengers and goods (HORIZON-CL5-2021-D6-01-12 – Controlling infection on large passenger ships).
Period: Apr 1, 2022 - present.
Funding: €213,000.
Role: Team leader.

[6] VERDI - SARS-coV2 variants Evaluation in pRegnancy and paeDIatrics cohorts.
Call: HORIZON-HLTH-2021-CORONA-01: COVID19 – HERA Incubator (HORIZON-HLTH-2021-CORONA-01-02 – Cohorts united against COVID-19 variants of concern).
Period: Nov 1, 2021 - present.
Funding: €110,000.
Role: Team leader.

[7] COVIDVAX – Impatto della vaccinazione COVID-19 su mortalità e misure di mitigazione.
Call: Fondazione VRT – Secondo bando Next Generation 2021.
Period: Apr 15, 2021 - Mar 31, 2022.
Funding: €25,000.
Role: Team leader.

[8] COVIDTN – Epidemiologia e trasmissione di COVID-19 in Trentino.
Call: Fondazione VRT – Call for Project COVID -19.
Period: Apr 14, 2020 - Oct 13, 2020.
Funding: €87,300.
Role: Principal Investigator.

[9] MOOD – Monitoring outbreak events for disease surveillance in a data science context.
Call: H2020-EU.3.1.2. – Preventing disease (SC1-BHC-13-2019 - Mining big data for early detection of infectious disease threats driven by climate change and other factors).
Period: Jan 1, 2020 - D, ec 31, 2024.
Funding: €309,000.
Role: Principal Investigator.

[10] VESTEC – Visual Exploration and Sampling Toolkit for Extreme Computing.
Call: H2020-EU.1.2.2. – FET Proactive (FETHPC-02-2017 – Transition to Exascale Computing).
Period: Sep 1, 2018 - Feb 28, 2022.
Funding: €230,000.
Role: Team leader.

[11] Reinforcement of the surveillance system and control of infectious diseases in Ethiopia.
Call: Agenzia Italiana per la Cooperazione allo Sviluppo – Bando per la concessione di contributi a iniziative presentate dagli Enti Territoriali - dotazione finanziaria 2017.
Period: Sep 7, 2018 - Sep 6, 2021.
Funding: €543,677.
Role: Principal Investigator.

[12] 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, .
Call: Italian Ministry of Health – Progetti di ricerca corrente 2017.

Period: Feb 12, 2018 - Dec 19, 2020.
Funding: €30,000.
Role: Team leader.

[13] CIMPLEX – Participatory, Interactive Social Exploratories: Bringing together Citizens, Models and Data.
Call: H2020-EU.1.2.2. – FET Proactive (FETPROACT-1-2014 – Global Systems Science (GSS)).
Period: Jan 1, 2015 - Dec 31, 2017.
Funding: €198,750.
Role: Principal Investigator.

[14] LEXEM – Laboratory of Excellence for Epidemiology and Modelling. Facing the invasion of Invasive Alien Species (IAS) into the territory of the Province of Trento.
Call: Provincia di Trento – Bando "Grandi progetti 2012".
Period: Sep 2, 2013 - Feb 28, 2017.
Funding: €216,390.
Role: Principal Investigator.

[15] EPIWORK – Developing the framework for an epidemic forecast infrastructure.
Call: FP7-ICT – Specific Programme "Cooperation": Information and communication technologies (ICT-2007.8.4 – Science of complex systems for socially intelligent ICT).
Period: Feb 1, 2009 - Jul 31, 2013.
Funding: €272,700.
Role: Principal Investigator.

[16] 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.
Call: European Centre for Disease Prevention and Control (ECDC).
Period: Jul 24, 2009 - Mar 21, 2012.
Funding: €26,449.
Role: Principal Investigator.

[17] Messa a punto di strumenti epidemiologici per il monitoraggio dell'influenza in Italia.
Call: Italian Ministry of Health – CCM 2009.
Period: 2009 - 2011.
Funding: €30,000.
Role: Principal Investigator.

[18] FLUMODCONT – Modelling the spread of pandemic influenza and strategies for its containment and mitigation.
Call: FP7-HEALTH – Specific Programme "Cooperation": Health (HEALTH-2007-2.3.3-6 – Development of pandemic influenza containment and mitigation strategies).

Period: May 14, 2008 - May 31, 2011.
Funding: €212,757.
Role: Principal Investigator.

Scientific assignments entrusted by qualified public or private institutions

[1] EPIQ2 – Quantitative epidemiology - Joint Lab FBK-ISS.
Institution: Istituto Superiore di Sanità.
Period: starting in 2025.
Funding: €366,000.
Role: Principal Investigator.

[2] MONITOR25-26 – Collaborazione con Regione Lombardia su sviluppo di un sistema di monitoraggio dell'andamento delle malattie infettive e efficacia e costo-efficacia di prodotti farmaceutici.
Institution: Lombardy Region.
Period: Jan 1, 2025 - Dec 31, 2026.
Funding: €160,000.
Role: Principal Investigator.

[3] MONITOR – Collaborazione con Regione Lombardia su metodi di epidemiologia quantitativa per la sorveglianza della pandemia SARS-CoV-2 e delle altre malattie infettive.
Institution: Lombardy Region.
Period: Jan 30, 2023 - Dec 31, 2024.
Funding: €120,000.
Role: Principal Investigator.

[4] EPIQ – Quantitative epidemiology - Joint Lab FBK-ISS.
Institution: Istituto Superiore di Sanità.
Feb 1, 2022 - Jan 31, 2025.
Funding: €366,000.
Role: Principal Investigator.

[5] Monitoraggio immunologico Post-Vaccinazione anti COVID-19 in Italia.
Institution: Istituto Superiore di Sanità.
Jun 11, 2021 - Dec 31, 2022.
Funding: €0.
Role: Principal Investigator.

[6] Sviluppo di modelli matematici per l'analisi della campagna vaccinale contro COVID-19 a supporto delle attività della Struttura commissariale.
Institution: Commissario straordinario per l'attuazione e il coordinamento delle misure di contenimento e contrasto dell'emergenza epidemiologica COVID-19 e per l'esecuzione

della campagna vaccinale nazionale Gen. C. A. Francesco Paolo Figliuolo.
Jun 9, 2021 - Mar 31, 2022.
Funding: €0.
Role: Principal Investigator.

[7] Analisi dell'epidemiologia di COVID-19 in Lombardia, proiezioni a breve-medio periodo del numero di casi attesi e dell'occupazione di letti in terapia intensiva, impatto del rilascio del lockdown sotto diversi scenari.
Institution: Lombardy Region, DG Welfare.
Apr 16, 2020 - Apr 15, 2022.
Funding: €0.
Role: Principal Investigator.

[8] Collaborazione finalizzata a produrre stime epidemiologiche sulla trasmissibilità di COVID-19 a supporto della pianificazione degli interventi di contenimento o mitigazione dell'epidemia.
Institution: Istituto Superiore di Sanità.
Mar 19, 2020 - Mar 18, 2022.
Funding: €0.
Role: Principal Investigator.

[9] Effect of the introduction of FLUAD TETRA^{TM} influenza vaccine on existing influenza vaccination program in Italy: a modelling and cost-effectiveness analysis.
Funder: Seqirus S.r.l.
Period: Jun 5, 2020 - Apr 30, 2021.
Funding: €50,000.
Role: Principal Investigator.

[10] Post-hoc cost-effectiveness analysis of the FLUCELVAX QUADRIVALENT^{TM} influenza vaccine in Italy: analysis from a dynamic model of influenza transmission.
Funder: Seqirus S.r.l.
Period: May 7, 2019 - Jun 30, 2019.
Funding: €14,500.
Role: Principal Investigator.

[11] Effect of introduction of FLUCELVAX QUADRIVALENT^{TM} influenza vaccine on exsting influenza vaccination programme in Italy: a modelling and cost-effectiveness analysis.
Institution: Ospedale Pediatrico Bambino Gesù.
Period: Dec 8, 2019 - Apr 30, 2019.
Funding: €32,500.
Role: Principal Investigator.

[12] Hypothesis of exogenous boosting and epidemiology of varicella and herpes zoster in the US.

Funder: Merck Sharp & Dohme Corp.
Period: Jan 10, 2018-Jan 9, 2021.
Funding: €98,000.
Role: Team leader.

[13] Modelling the transmission and control of methicillin-resistant *Staphylococcus aureus* in community and health care institutions.
Institution: Akershus University Hospital and Norwegian Institute of Public Health.
Period: Sep 1, 2017 - Aug 31, 2018.
Funding: €15,000.
Role: Team leader.

[14] 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.
Institution: Fondazione Edmund Mach.
Period: Aug 8, 2017 - Jun 30, 2018.
Funding: €15,000.
Role: Principal Investigator.

[15] 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.
Institution: Istituto Superiore di Sanità
Period: 2009 - 2011
Funding: €140,000.
Role: Principal Investigator.

[16] Chikungunya virus infection: epidemiological and clinical features.
Institution: Emilia-Romagna Region.
Period: 2008 - 2011.
Funding: €100,000.
Role: Principal Investigator.

Editorial boards and reviewer activities

- Member of the Editorial Board of Plos One (2013–2017) and of Frontiers in Public Health (2022–present).
- Reviewer for several of the most influential journals in general medicine (The Lancet, Nature Medicine, The Lancet Global Health among others), public health (The Lancet Public Health, Eurosurveillance, The Lancet Regional Health – Europe among others),

infectious diseases (The Lancet Infectious Diseases, Emerging Infectious Diseases, International Journal of Infectious Diseases among others) and multidisciplinary journals (Science, Nature Communications, PNAS among others).

Awards & honors

- National scientific qualification (2023) as full professor for the disciplinary field of 06/M1 - Hygiene, public health, nursing and medical statistics.
- Awarded the Seal of San Wenceslao, the highest honor of the City of Trento, on June 26, 2021, in recognition of contributions to the development of strategies addressing the COVID-19 epidemiological emergency.
- In May 2021, Nature highlighted key COVID-19 studies published one year into the pandemic (https://www.nature.com/articles/d41586-020-00502-w). Among these were two papers led by the FBK Center for Health Emergencies:
    1. J. Zhang et al., *Changes in contact patterns shape the dynamics of the COVID-19 outbreak in China*. Science, 368(6498):1481-1486, 2020;
    2. P. Poletti et al., *Association of Age With Likelihood of Developing Symptoms and Critical Disease Among Close Contacts Exposed to Patients With Confirmed SARS-CoV-2 Infection in Italy*. JAMA Network Open, 4(3):e211085, 2021.
- Winner of the 2018 D4R Big Data Challenge for the paper:
  P. Bosetti et al., *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, 117(48):30118-30125, 2020.
- Received the 2016 Aspen Prize for the paper:
  S. Merler et al., *Spatiotemporal spread of the 2014 outbreak of Ebola virus disease in Liberia and the effectiveness of non-pharmaceutical interventions: a computational modelling analysis*, The Lancet Infectious Diseases, 15(2):204-211, 2015.
- Received the 2015 Bellman Prize for the paper:
  P. Poletti et al., *Risk perception and effectiveness of uncoordinated behavioral responses in an emerging epidemic*, Mathematical Biosciences, 238(2):80-89, 2012.
- Appointed ISI (Institute for Scientific Interchange, Torino, Italy) Fellow, 2015.

Teaching

Teaching assignments (incarichi di didattica in qualità di docente)

AY 2016–2017: 4 hours, "Advanced Topics in Biomathematics", Department of Mathematics, University of Trento.

AY 2014–2015: 21 hours, "Advanced Topics in Biomathematics", Department of Mathematics, University of Trento.

AY 2009–2010: 21 hours, "Biomatematica 2", Faculty of Mathematical, Physical and Natural Sciences, University of Trento.

AY 2002–2003: 42 hours, "Laboratorio di Informatica per i Modelli Statistici", Faculty of Mathematical, Physical and Natural Sciences, University of Trento.

AY 2001–2002: 42 hours, "Laboratorio di Informatica per i Modelli Statistici", Faculty of Mathematical, Physical and Natural Sciences, University of Trento.

Supervision of doctoral and specialisation theses

- Supervisor of three ongoing PhD theses at the Department of Physics and Astronomy, Centre for Network Medicine, University of Padua:
    1. "Interplay between local population dynamics and global factors";
    2. "Impact of microscopic environmental factors on population dynamics of localized communities";
    3. "Constraining predictive models with complex dynamical systems".
- **2022:** supervisor of PhD Thesis "Assessing the determinants of COVID-19 burden to address disease-control policy decisions" by Margherita Galli, Doctoral School in Computer Science, Mathematics and Physics, University of Udine.
- **2019:** supervisor of PhD Thesis "Social dynamics and behavioral response during health threats" by Paolo Bosetti, doctoral School in Mathematics, University of Trento.
- **2017:** supervisor of PhD Thesis "Mathematical modeling for epidemiological inference and public health support" by Valentina Marziano, Doctoral School in Mathematics, University of Trento.
- **2014:** supervisor of Specialization Thesis "Ebola outbreak 2013-15. La catena di trasmissione e la valutazione delle misure di contenimento dell'epidemia nel distretto di Pujehun, Sierra Leone" by Stefano Parlamento, Scuola di Specializzazione in Medicina d'Emergenza-Urgenza, University of Udine.

- **2010:** supervisor of PhD Thesis "Human behaviour in epidemic modelling" by Piero Poletti, doctoral School in Mathematics, University of Trento.
- **2009:** supervisor of PhD Thesis "New-generation individual based models for infectious diseases transmission" by Marco Ajelli, International Doctorate School in Information and Communication Technologies, University of Trento.
- Among supervised PhD students, 1 full professor (School of Public Health, Indiana University, US), 1 research engineer (Institute Pasteur, Paris, France), 2 senior researchers (Center for Health Emergencies, FBK, Italy).

Lessons, seminars

- Lesson "Epidemiologia delle malattie infettive: modelli matematici", 2 hours, Master di II livello in Epidemiologia, Università Vita-Salute San Raffaele, Italy, 29/4/2025.
- Seminar "Tecniche di AI ed epidemiologia delle malattie infettive: rischi e opportunità", 1 hour, Scuola di Specializzazione in Igiene e Medicina Preventiva, Università del Molise, Italy, 28/3/2025.
- Seminar "Rischio di trasmissione di arbovirosi in Italia", 1 hour, Scuola di Specializzazione in Igiene e Medicina Preventiva, Università del Molise, Italy, 13/12/2024.
- Seminar "Metodi matematici e statistici per la sorveglianza epidemiologica di SARS-CoV-2 in Italia", 1 hour, Scuola di Specializzazione in Igiene e Medicina Preventiva, Università del Molise, Italy, 28/4/2023.
- Seminar "Utilizzo e incertezza della stima del numero di riproduzione di SARS-CoV-2", 1 hour, Dipartimento di Matematica dell'Università di Trento, Italy, 8/6/2022.
- Seminar "COVID-19: Modelli e indicatori per provvedimenti di sanità pubblica", 1 hour, MaLGa - Machine Learning Genoa Center, Università di Genova, Italy, 15/11/2021.
- Seminar "Il ruolo della matematica come supporto nella risposta ad una pandemia", 1 hour, "Advances in Socio-Epidemic Mathematical Modelling", Unione Matematica Italiana, gruppo Modellistica Socio-Epidemiologica (MSE), Italy, 17/06/2021.
- Seminar "Understanding Ebola virus disease in West Africa: epidemiological investigation and mathematical modeling", "Mathematics mini courses 2016-17", 1 hour, University of Verona, Italy, 16/1/2017.

Committees

July 8-12, 2019: organiser of the International Summer School "Data Science and Epidemic Models", July 8-12, 2019, Trento.

May 1, 2017 – Apr 30, 2020: member of the PhD Committee of the Doctorate School in Computer Science, Mathematics and Physics, University of Udine.

Third mission activities

Public health activities

2024 - present: member of the Mathematical Modelling Working Group within the R&D Blueprint, Department of Epidemic and Pandemic Preparedness and Prevention (EPP), World Health Organization (WHO).

2020 - 2023: during the COVID-19 pandemic he served as a scientific advisor to the Italian National Institute of Health (Istituto Superiore di Sanità), the Italian Ministry of Health, the Special Commissioner for the COVID-19 Emergency (Commissario Straordinario per l'Emergenza COVID-19, Generale Francesco Figliuolo), and the Italian Scientific and Technical Committee (Comitato Tecnico-Scientifico). He also supported the Ministry of Health's COVID-19 monitoring system and the Cabina di Regia:

- COVID-19 integrated surveillance (weekly reports from the integrated surveillance system of the Italian National Institute of Health – ISS)
  https://www.epicentro.iss.it/coronavirus/sars-cov-2-sorveglianza-dati
- SARS-CoV-2 virological surveillance (monthly surveys by the ISS, Ministry of Health, regional governments, and reference laboratories)
  https://www.iss.it/en/ricerca?categoryId=5616548

2020 - 2022: during the COVID-19 pandemic he served as a scientific advisor to several Italian local health authorities, including Lombardia and Veneto Regions, and the Autonomous Province of Trento.

2014 - 2015: he served as a scientific advisor to Doctors with Africa CUAMM during the 2014-2015 Ebola epidemic in Sierra Leone.

2009 - 2010: he served as a scientific advisor to the Italian National Institute of Health (Istituto Superiore di Sanità) during the 2009 H1N1 pandemic, providing support to the Crisis Unit of the Ministry of Health (Unità di Crisi del Ministero della Salute).

2009: he served as a member of the European Centre for Disease Prevention and Control (ECDC) Influenza A(H1N1) Modelling Group, contributing to the assessment of the H1N1 influenza situation in Europe.

Preparedess and response plans

2023: member of the working group responsible for drafting the plan ”Piano strategico operativo di preparazione e risposta ad una pandemia da patogeni a trasmissione respiratoria a maggiore potenziale pandemico 2025-2029”, Italian Ministry of Health.

2021: member of the working group responsible for drafting the plan ”Indicazioni strategiche ad interim per la prevenzione e il controllo delle infezioni da SARS-CoV-2 in ambito scolastico (a.s. 2021-2022)”, Italian Ministry of Health.

2021: member of the working group responsible for drafting the plan ”Piano strategico-operativo nazionale di preparazione e risposta a una pandemia influenzale - (PanFlu) 2021-2023”, Italian Ministry of Health.

2020: member of the working group responsible for drafting the plan ”Prevenzione e risposta a Covid-19: evoluzione della strategia e pianificazione nella fase di transizione per il periodo autunno-invernale”, Italian Ministry of Health.

2020: member of the working group responsible for drafting the plan ”Indicazioni operative per la gestione di casi e focolai di SARS-CoV-2 nelle scuole e nei servizi educativi dell’infanzia”, Italian Ministry of Health.

2020: member of the working group responsible for drafting the plan ”Piano nazionale sanitario in risposta a un’eventuale emergenza pandemica da Covid-19”, Italian Ministry of Health.

Outreach & media – Workshops, conferences & seminars

- Speaker on ”Modelli matematici per lo studio delle arbovirosi”. Training course ”Arbovirus: patogeni d’importazione con rischio di circolazione autoctona”, II edition, INMI Spallanzani IRCSS, , Italy,, 19-20/5/2025.
- Speaker on ”Epidemiologia delle malattie infettive: modelli matematici”. Master di II livello in Epidemiologia, Università Vita-Salute San Raffaele, Italy, 29/4/2025.
- Speaker on ”Tecniche di AI ed epidemiologia delle malattie infettive: rischi e opportunità”. Scuola di Specializzazione in Igiene e Medicina Preventiva, Università del Molise, Italy, 28/3/2025.
- Speaker on ”Epidemiologia di SARS-CoV-2 nella fase iniziale della pandemia e lezioni apprese”. Public event ”Tra memoria e futuro, a Codogno incontro a 5 anni dal Covid”, Codogno, Italy, 18/2/2025.

- Speaker on ”Metodi di epidemiologia quantitativa per la sorveglianza delle malattie infettive”. Congresso Società Italiana di Patologia Clinica e Medicina di Laboratorio (Sipmel), IX edition, Riva del Garda, Italy, 28/10/2024.
- Speaker on ”L’intelligenza artificiale nella lotta alle malattie infettive: rischi e opportunità”. Conference ”Attualità e Controversie in Terapia Antinfettiva: Acta reboot”, III edition, Milano, Italy, 24-25/10/2024.
- Speaker on ”Rischio di trasmissione di arbovirosi in Italia”. Scuola di Specializzazione in Igiene e Medicina Preventiva, Università del Molise, Italy, 13/12/2024.
- Speaker on ”AI e prevenzione epidemiologica”. Public event ”Oltre l’umano: intelligenza artificiale, nuove frontiere della scienza e trasformazioni sociali”, Pavia, Italy, 22/5/2024.
- Speaker on ”Metodi matematici e statistici per la sorveglianza epidemiologica di SARS-CoV-2 in Italia”. Scuola di Specializzazione in Igiene e Medicina Preventiva, Università del Molise, Italy, 28/4/2023.
- Speaker on ”Scienza e decisioni”. Public event with Stefano Merler e Alessandro Vespignani, Trento, Italy, 11/1/2023.
- Speaker on ”Il contributo dei modelli matematici alla comprensione degli scenari futuri: fine della pandemia oppure endemia di SARS-CoV2?”. Workshop ”Vaccinazioni: un futuro di salute”, VII edition, Firenze, Italy, 20/9/2022.
- Speaker on ”Utilizzo e incertezza della stima del numero di riproduzione di SARS-CoV-2”. Seminar, Math Department, Università di Trento, Italy, 8/6/2022.
- Speaker on ”Modelli e indicatori per provvedimenti di sanità pubblica”. Seminars ”L’Orizzonte del post Covid-19”, Istituto Lombardo - Accademia di Scienze e Lettere, Italy, 3/2/2022.
- Speaker on ”The role of mathematics as a support in the response to a pandemic”. Workshop ”Monitoring COVID19 Pandemic: epidemiological and sequencing data for decision making”, Istituto Superiore di Sanità – Istituto Zooprofilattico Sperimentale dell’Abruzzo and Molise ”G. Caporale”, Italy, 16/12/2021.
- Speaker on ”Pattern di diffusione spaziale di SARS-CoV-2 in Italia”. Workshop ”L’epidemiologia del COVID-19, i dati satellitari e l’Intelligenza Artificiale per la lotta alle pandemie”, Università di Modena e Reggio Emilia, Italy, 2/12/2021.
- Speaker on ”COVID-19: Modelli e indicatori per provvedimenti di sanità pubblica”. Seminar, MaLGa - Machine Learning Genoa Center, Università di Genova, Italy, 15/11/2021.
- Speaker on ”Il ruolo della matematica come supporto nella risposta ad una pandemia”. Workshop ”Open Science e COVID-19. Collaborare per contrastare la pandemia”, CNR – Istituto Superiore di Sanità, Italy, 28/9/2021.

- Speaker on ”Modelli e indicatori per provvedimenti di sanità pubblica”. Congresso Società Italiana di Statistica Medica ed Epidemiologia Clinica, XI edition, Bari, Italy, 15-17/9/2021.
- Speaker on ”Il ruolo della matematica come supporto nella risposta ad una pandemia”. Seminars ”Advances in Socio-Epidemic Mathematical Modelling”, Unione Matematica Italiana, gruppo Modellistica Socio-Epidemiologica (MSE), Italy, 17/06/2021.
- Speaker on ”Monitoraggio di COVID-19 in Italia”. Scientific presentation delivered during the joint press conference Istituto Superiore di Sanità – Ministero della Salute on COVID-19, Roma, Italy 18/11/2020.
- Speaker on ”Modelli, numeri di riproduzione e monitoraggio di COVID-19 in Italia”. Workshop ”Il nuovo coronavirus 2019 - COVID-19”, Istituto Superiore di Sanità, Roma, Italy 13/5/2020.
- Speaker on ”Valutazione di politiche di riapertura utilizzando contatti sociali e rischio di esposizione professionale”. Scientific presentation delivered during the joint press conference Istituto Superiore di Sanità – Ministero della Salute on COVID-19, Roma, Italy 30/4/2020.
- Speaker on ”Trasmissibilità di SARS-COV-2 in Italia”. Scientific presentation delivered during the joint press conference Istituto Superiore di Sanità – Ministero della Salute on COVID-19, Roma, Italy 24/4/2020.
- Speaker on ”Modelli matematici per stime relative alla trasmissione dell’infezione da nCoV”. Workshop ”Il nuovo coronavirus 2019-NCoV: stato dell’arte”, Istituto Superiore di Sanità, Roma, Italy 5/2/2020.
- Speaker on ”The 2014-2015 EVD epidemic in West Africa: epidemiology and impact of interventions”. Workshop ”Implementation research nei paesi a risorse limitate”, Medici con l’Africa - CUAMM intitolato, Padova, Italy 30/9 - 3/10/2019.
- Speaker on ”Trasmissione e rischio d’infezione di arbovirosi trasmesse dalle zanzare Aedes”. Workshop ”Arbovirosi: una problematica emergente”. Fondazione Edmund Mach e Fondazione Bruno Kessler, Trento, Italy 15/2/2019.
- Speaker on ”Big data e malattie infettive (prevedibili da vaccino)”. Workshop ”Big Data in Sanità”, I edition, TrentinoSalute4.0, Trento, 27/10/2017.
- Speaker on ”Non tutti i vaccini sono sexy. Disuguaglianze tra nord e sud del mondo”. Festival dell’Economia di Trento, 2017: ”La salute disuguale”, Trento, 2/6/2017.

- Speaker on ”Understanding Ebola virus disease in West Africa: epidemiological investigation and mathematical modeling”. ”Mathematics mini courses 2016-17”, Università di Verona, Italy, 16/1/2017.
- Speaker on ”Population dynamics of endemic mosquitoes species and epidemiological implications in Northern Italy”, Conference ”Facing the invasion of alien arthropods species: ecology, modelling and control of their economic impact and public health implications”, Trento, Italy, 7-9/11/2016.
- Speaker on ”Ebola: moving forward after the emergency”. Meeting Medici con l’Africa – CUAMM, Verona, Italy, 21/11/2015.
- Speaker on ”Understanding EVD in West Africa: epidemiological investigation and computational modeling”, Conference ”Mathematical and Computational Epidemiology of Infectious diseases (MathCompEpi 2015)”, Erice, Italy, 30/8/2015 – 5/9/2015.
- Organizer of the Workshop ”Facing the challenge of infectious diseases”, Pré-Saint-Didier, Aosta, Italy, 18/1/2012.
- Speaker on ”Determinants of the spatiotemporal dynamics of the 2009 H1N1 pandemic in Europe”. Workshop ”The role of modelling in influenza pandemic planning and response: lessons from 2009”, Venice, Italy, 26-27/5/2011.
- Speaker on ”Spatiotemporal dynamics of the 2009 H1N1 pandemic in Europe”. Workshop ”H1N1 Modeling Meeting”, ECDC (European Center for Disease Control and Prevention), Stockholm, Sweden, 19-20/10/2010.
- Speaker on ”Factors affecting the spread of an epidemic in Europe: population heterogeneity and human mobility”. Conference International Workshop and Conference on Complex Networks and their Applications (Netsci) 2009, Venice, Italy, 9/6-3/7/2009.
- Speaker on ”Modeling influenza pandemic in Italy: an individual based approach”. Convegno intermedio della Società Italiana di Statistica (SIS) 2007, Venice, Italy, 27-28/9/2007.
- Speaker on ”Strategies for containing an influenza pandemic: the case of Italy”. Conference on Bio Inspired Models of Network, Information and Computing Systems (Bionetics) 2006, Cavalese, Italy, 11/12/2006.
- Speaker on ”Machine learning on historic air photographs for mapping risk of unexploded bombs”. Conference International Conference on Image Analysis and Processing (ICIAP) 2005 , Cagliari, Italy, 7/9/2005.
- Speaker on ”Exact Bagging with k-Nearest Neighbour Classifiers”. Conference Multiple Classifier Systems (MCS) 2004, Cagliari, Italy, 9-11/6/2004.

- Speaker on ”Mapping tick borne diseases risk in Trentino, Italian Alps”. Conference on Ticks and Tick-Borne Pathogens 2002, Banff, Canada, 21-26/7/2002.
- Speaker on ”The Dynamics of AdaBoost Weights Tells You What’s Hard to Classify”. Conference Multiple Classifier Systems (MCS) 2002, Cagliari, Italy, 24-26/6/2002.

In the press: selection on COVID-19 research

- *Corriere della Sera* (10/3/2020) Il matematico dell’epidemia: forse non conosceremo mai il numero degli asintomatici.
- *Il Messaggero* (16/5/2020) L’intervista Stefano Merler. ”Non ci sono dati effetto-riaperture. Bisogna aspettare un’altra settimana”.
- *Il Manifesto* (22/5/2020) INTERVISTA A STEFANO MERLER DELLA FONDAZIONE BRUNO KESSLER, CHE AL GOVERNO HA FORNITO LE ANALISI PER LA FASE 2. I bambini esclusi, ”ci è stato chiesto di concentrarci sull’economia”.
- *Il Messaggero* (25/6/2020) L’intervista Stefano Merler. La scienza divisa disorienta. Niente prove sul virus debole.
- *Il Manifesto* (22/8/2020) STEFANO MERLER DELLA FONDAZIONE KESSLER. Passata l’emergenza la sanità si è ripresa.
- *La Repubblica* (30/8/2020) Il documento sui rischi Covid custodito dalla Protezione civile. Lo studio sul tavolo del Governo che già il 12 febbraio prevedeva fino a 60mila morti.
- *La Repubblica* (8/9/2020) Parla il ricercatore che elaborò per il governo gli scenari del Covid. Merler ”Da 12 anni l’Italia è senza un piano pandemico. Ci è costato molto caro”.
- *La Verità* (31/8/2020) IL GOVERNO DEI MISTERI Sapevano tutto già dal 12 febbraio. Ma non hanno fermato l’epidemia.
- *Il Fatto Quotidiano* (31/8/2020) Allarme virus ”60 mila morti”. Così il governo corse ai ripari.
- *Corriere della Sera* (19/11/2020) LE PREVISIONI. Merler (Fondazione Kessler): l’indice sta scendendo con una velocità simile a quella della prima ondata: ”Rt sotto a 1 già nei prossimi giorni ma i contagi sono ancora troppi”.
- *Il Mattino* (3/2/2021) Intervista Stefano Merler. ”La zona gialla non blocca l’estensione dei contagi. Il rischio è la variante inglese”.
- *Il Fatto Quotidiano* (10/2/2021) ”Variante inglese, rischio 400 mila casi al giorno”. IL VERBALE Lo studio di Merler al Cts.

- *Corriere della Sera* (10/2/2021) DATAROOM Rischio terza ondata: i dati per prevenirla. I TRE INDICATORI PER PREVEDERE L'ANDAMENTO DELLA PANDEMIA. MERLER (FONDAZIONE KESSLER).
- *Domani* (23/2/2021) IL DOCUMENTO INEDITO SULLA PRIMA ONDATA "Allarme contagi" La regione Lombardia ignorò l'avvertimento. Già a fine febbraio 2020 Stefano Merler, della Fondazione Kessler, aveva trasmesso le stime sull'epidemia ora acquisite dai pm.
- *Corriere della Sera* (27/4/2021) Lo studio segreto sulle riaperture "Morti stabili fino al 15 luglio". I calcoli forniti da Merler a Cts.
- *La Repubblica* (11/5/2021) L'intervista al matematico che valuta l'andamento dell'infezione. "L'indice Rt ci ha permesso di anticipare l'epidemia ma ora calcoliamolo sui ricoveri".
- *Corriere della Sera* (21/5/2021) Merler, matematico ed epidemiologo che fornisce i dati al governo: "Ecco perché è stato possibile ripartire, ma serve ancora prudenza". Un italiano su due è immune (tra guariti e vaccinati). Ospedali liberi a metà giugno.
- *Il Mattino* (22/7/2021) Volano i nuovi contagi. È già "quarta ondata". Merler (Fondazione Kessler): giovani in Europa: meno rischi per i vaccinati.
- *Il Manifesto* (3/8/2021) LO STUDIO Un mese di zone a colori, 25 mila ricoveri in meno.
- *La Repubblica* (9/8/2021) Stefano Merler, matematico del virus. "Delta spinta dagli Europei ma l'Rt si sta raffreddando".
- *Il Messaggero* (15/9/2021) L'intervista Stefano Merler. "La pandemia non sta finendo, c'è l'incognita scuole riaperte.
- *La Repubblica* (26/9/2021) Il dossier. Gli esperti e la nuova stagione. "La fine del virus dipende da noi".
- *La Repubblica* (17/11/2021) Evitati 12 mila morti grazie al vaccino. "Immunità di gregge solo con i bimbi". Lo studio di Iss, Salute e Fondazione Kessler.
- *Il Giornale* (17/11/2021) OLTRE IL VIRUS La campagna di immunizzazione. "Grazie ai vaccini evitati 12 mila morti".
- *Avvenire* (17/11/2021) LO STUDIO DI ISS E FONDAZIONE KESSLER. Grazie ai vaccini 12 mila morti in meno.
- *Domani* (29/11/2021) Bugie e sciatteria: Speranza e il ministero sotto accusa.
- *Corriere della Sera* (10/12/2021) DATAROOM Da Alfa a Omicron, com'è cambiato il virus.

- *Il Fatto Quotidiano* (9/7/2022) LO STUDIO Merler e l'Iss hanno calcolato i positivi sommersi: mai così tanti". Letalità ridotta allo 0,05% con i vaccini". Ma non basta "Più di metà degli italiani ha preso il Covid nel 2022".
- *Domani* (18/10/2022) DOBBIAMO PREOCCUPARCI? Il caso di Mede spiega perché i contagi da Covid aumentano.
- *Domani* (3/12/2022) NUOVI DOCUMENTI IN MANO ALLA PROCURA DI BERGAMO Fontana ha mentito sul Covid. La mail e gli scenari ignorati.
- *Nature Italy* (17/1/2023) Will testing travellers from China keep new COVID variants out? Stefano Merler, epidemiologist, talks about the current travel restrictions and genomic surveillance.
- *Corriere della Sera* (2/3/2023) "È il focolaio più grave". Quei giorni terribili e le discussioni tra Milano e Roma. L'escalation del contagio, la nota del Cts al governo.
- *Domani* (3/3/2023) L'INCHIESTA DELLA PROCURA DI BERGAMO Le accuse a Conte e Fontana sul Covid: ecco i verbali.
- *Corriere della Sera* (4/3/2023) Covid, ecco l'atto d'accusa. "Le previsioni sul contagio ignorate perché drammatiche". I pm: ritardi e omissioni. La super consulenza di Crisanti.
- *Il Messaggero* (5/3/2023) Gli allarmi inascoltati del consulente "E nessuno sapeva tradurre l'Oms".
- *Domani* (5/3/2023) L'INCHIESTA SUL COVID - I VERBALI Fontana sapeva degli scenari catastrofici sui contagi.
- *Corriere della Sera* (8/3/2023) Lo studio sui 100 mila morti svelato dai giornali "Speranza è furibondo".
- *Corriere della Sera* (9/3/2023) Le carte del Piano segreto "Impatto devastante sul sistema sanitario". Gli scenari presentati da Merler al Cts prima del Paziente 1.
- *Avvenire* (10/3/2023) La decisione di "secretare" i documenti. Il no del Cts alla diffusione. L'epidemiologo Merler: da inizio gennaio il virus era già fuori dalla Cina.