

# Curriculum Vitae for Sebastian Nielsen, MSc. Statistics

## Personal data

Name: Sebastian Nielsen

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Date of birth: 14 March 1989

## Education

2013-2016: Master of Science in Statistics

2009-2013: Bachelor of Science in Mathematics

2005-2008: Bornholms Gymnasium

## Employment

2021: Statistician at randomized controlled trial funded by EDCTP, multi-center trial with collaborators from Portugal, Cape Verde, Guinea-Bissau, Mozambique and Denmark.

2019 - present: PhD student, Bandim health Project, Department of Clinical Research, University of Southern Denmark.

2018 - present: stationed at the Bandim Health Project field station in Guinea-Bissau, where my main tasks consist of supervision of existing randomized controlled measles vaccine trials, support and guide the research year students and monitor the routine data collection in urban districts of the capital, Bissau.

2017- 2019: Statistician, Research Center for Vitamins and Vaccines, Bandim Health Project, Statens Serum Institut.

2014-2017: Teacher of Mathematics, Frederiksberg HF-Kursus.

## Scientific focus areas

Developing new methods and protocols to assess the non-specific effects of health intervention campaigns such as oral polio vaccine and measles vaccine in low-income countries. Analysing the non-specific effects of measles vaccine and oral polio vaccine in data from randomised controlled trials from Guinea-Bissau. Explore more than 40 years of health and demographic surveillance site data from urban Bissau to discover the impacts of health interventions on a population scale.

## Statistical tools

In the daily work at Bandim Health Project I use **R**, Stata, REDCap, dBase, Excel and SQL to perform the daily tasks of database management and monitoring and to perform statistical analyses primarily within survival analysis and time series models.

## Publications

1. Andersen A, Fisker AB, **Nielsen S**, Rodrigues A, Benn CS, Aaby P. National immunisation campaigns with oral polio vaccine may reduce all-cause mortality: An analysis of 13 years of demographic surveillance data from an urban African area. *Clin Infect Dis*. 2020 Sep 19:ciaa1351. doi: 10.1093/cid/ciaa1351.
2. Madsen AMR, Scholtz-Buchholzer F, Benfield T, Bjerregaard-Andersen M, Dalgaard LS, Dam C, Ditlev SB, Faizi G, Johansen IS, Kofoed PE, Kristensen GS, Loekkegaard ECL, Mogensen CB, Mohamed L, Ostefeld A, Oedegaard ES, Soerensen MK, Wejse C, Jensen AKG, **Nielsen S**, Krause TG, Netea MG, Aaby P, Benn CS. Using BCG vaccine to enhance non-specific protection of health care workers during the COVID-19 pandemic: A structured summary of a study protocol for a randomised controlled trial in Denmark. *Trials*. 2020 Sep 17;21(1):799. doi: 10.1186/s13063-020-04714-3.
3. Aaby P, **Nielsen S**, Fisker A, Pedersen LM, Welaga P, Hanifi SMA, Martins CL, Rodrigues A, Chumakov K, Benn CS. Stopping oral polio vaccine (OPV) after defeating poliomyelitis: A Pyrrhic victory? Systematic review of the non-specific effects of OPV. Preprint, [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=3781637](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3781637).
4. **Nielsen S**, Khalek MA, Benn CS, Aaby P, Hanifi SMA. National immunisation campaigns with oral polio vaccine may reduce all-cause mortality: Analysis of 2004–2019 demographic surveillance data in rural Bangladesh. *EClinicalMedicine*. Elsevier; 2021 Jun 1;36:100886.
5. Sørensen MK, Scholtz-Buchholzer F, Jensen AM, **Nielsen S**, Monteiro I, Aaby P, Benn CS. Retesting the hypothesis that early Diphtheria-Tetanus-Pertussis vaccination increases female mortality: An observational study within a randomised trial. *Vaccine*. 2021 Jun 30:S0264-410X(21)00720-9. doi: 10.1016/j.vaccine.2021.06.008.