

**RADBOUD J. DUINTJER TEBBENS, PH.D.**  
Kid Risk, Inc., 605 N. High St. #253, Columbus, OH 43215

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**EDUCATION:**

- 2005-2008    Post-doctoral research  
                 Harvard School of Public Health, Boston, MA
- 2005            Ph.D. in Applied Mathematics  
                 Delft University of Technology, Delft, Netherlands
- 2002            M.S. and B.S. in Applied Mathematics  
                 Delft University of Technology, Delft, Netherlands

**CURRENT POSITION:**

- 2010-2018    Kid Risk, Inc., Boston, MA, Vice President. ([www.kidrisk.org](http://www.kidrisk.org)).

**PRIOR POSITIONS:**

- 2009-2010    Assistant Professor in Risk and Decision Analysis, Operations Research and Risk Analysis section, Delft Institute of Applied Mathematics, Delft University of Technology, Delft, Netherlands
- 2005-2008    Post-doctoral Research Associate: Analyzed and modeled different aspects of polio management, including economics of eradication vs. control and vaccine stockpile management, in context of collaboration with CDC  
                 Harvard School of Public Health, Department of Health Policy and Management, Boston, MA
- 2006-2007    Visiting Scholar:  
                 Massachusetts Institute of Technology, Sloan School of Management, System Dynamics Group, Cambridge, MA
- 2002-2004    Visiting Scholar:  
                 Harvard School of Public Health, Department of Health Policy and Management, Boston, MA
- 2000            Intern: Implemented workflow management tool and analyzed logistics information management systems  
                 Campbell's de México, Information Systems Division, Celaya, Mexico

- 1998            Research Assistant: Developed computer tool to study human concentration lapses and statistically analyzed experimental results  
Czech Technical University, Department of Transportation, Prague, Czechia

### **HONORS AND AWARDS:**

- 2014    INFORMS' Franz Edelman Award for Achievement in Operations Research and the Management Sciences in 2014, as member of five-person CDC-Kid Risk polio modeling team (<https://www.informs.org/About-INFORMS/News-Room/Press-Releases/2014-Edelman-Winner-is-CDC>)
- 2008    Jay Wright Forrester Award for the best contribution to the field of System Dynamics during the preceding five years (with Kimberly M. Thompson), for "Eradication versus control for poliomyelitis: An economic analysis" published in *The Lancet* in 2007
- 2008    Practice Award Finalist, Decision Analysis Society (with Kimberly M. Thompson)
- 2001    Best Student Paper, Annual meeting of the Society for Risk Analysis, Seattle, WA, December 3-5, 2001
- 2001    Delft University Fund, Royal Institute of Engineers Scholarship, Delft University Board of Directors Fund, Information Technology and Systems Fund, and Foundation of the *Vrijvrouwe van Renswoude*: Travel support for study abroad

### **BIBLIOGRAPHY:**

#### **Theses/Dissertations:**

Duintjer Tebbens RJ. Dynamics and sensitivities in cost-effectiveness analyses for vaccine interventions: A retrospective case study on polio vaccinations in the USA. Unpublished Master's Thesis. Delft University of Technology, 2002.

Duintjer Tebbens RJ. Quantitative analysis of trade-offs and model input sensitivities in public health. Committee: Cooke RM, Thompson KM, Hunink MGM, Mazzuchi TA, Heemink AW, Kurowicka D, Pallansch MA, Groeneboom P. Delft University Press, 2005. ISBN 90-407-2611-6. Doctoral Dissertation, available at <http://repository.tudelft.nl/file/82846/331590>.

#### **Peer-reviewed journal articles:**

1. Sangruee N, Duintjer Tebbens RJ, Cáceres VM, Thompson KM. Policy decision options during the first 5 years following certification of polio eradication. *Medscape General Medicine*. December 18, 2003;5(4):35.
2. Duintjer Tebbens RJ, Pallansch MA, Kew OM, Cáceres VM, Sutter RW, Thompson KM. A dynamic model of poliomyelitis outbreaks: Learning from the past to help inform the future. *American Journal of Epidemiology*. 2005;162(4):358-372.

3. Duintjer Tebbens RJ, Pallansch MA, Kew OM, Cáceres VM, Jafari H, Cochi SL, Aylward RB, Thompson KM. Risks of paralytic disease due to wild or vaccine-derived poliovirus after eradication. *Risk Analysis*. 2006;26(6):1471-1505.
4. Duintjer Tebbens RJ, Sangrujee N, Thompson KM. The costs of polio risk management policies after eradication. *Risk Analysis*. 2006;26(6):1507-1531.
5. Thompson KM, Duintjer Tebbens RJ. Retrospective cost-effectiveness analyses for polio vaccination in the United States. *Risk Analysis*. 2006;26(6):1423-1440.
6. Thompson KM, Duintjer Tebbens RJ, Pallansch MA. Evaluation of response scenarios to potential polio outbreaks using mathematical models. *Risk Analysis*. 2006;26(6):1541-1556.
7. Thompson KM, Duintjer Tebbens RJ, Pallansch MA, Kew OM, Sutter RW, Aylward RB, Watkins M, Gary HE, Jr., Alexander JP, Jr., Venczel L, Johnson D, Cáceres VM, Sangrujee N, Jafari H, Cochi SL. Development and consideration of global policies for managing the future risks of poliovirus outbreaks: Insights and lessons learned through modeling. *Risk Analysis*. 2006;26(6):1571-1580.
8. de Gourville EM, Sangrujee N, Duintjer Tebbens RJ, Pallansch MA, Thompson KM. Global surveillance and the value of information: The case of the global polio laboratory network. *Risk Analysis*. 2006;26(6):1557-1569.
9. Thompson KM, Duintjer Tebbens RJ. Eradication versus control for poliomyelitis: an economic analysis. *The Lancet*. 2007; 369(9570):1363-1371 (see letter July 2007; 370(9582):133).
10. Lewandowski D, Cooke RM, Duintjer Tebbens RJ. Sample-based estimation of correlation ratio with polynomial approximation. *Transactions on Modeling and Computer Simulation. AMC Transactions on Modeling and Computer Simulation*. 2007;18(1):1-17.
11. Duintjer Tebbens RJ, Thompson KM, Hunink MGM, Mazzuchi TM, Lewandowski D, Kurowicka D, Cooke RM. Uncertainty and sensitivity analyses of a dynamic economic evaluation model for vaccination programs. *Medical Decision Making*. 2008; 28(2):182-200.
12. Thompson KM, Duintjer Tebbens RJ, Pallansch MA, Kew OM, Sutter RW, Aylward RB, Watkins M, Gary H, Alexander J, Jafari H, Cochi SL. The risks, costs, and benefits of future global policies for managing polioviruses. *American Journal of Public Health* 2008;98(7):1322-1330.
13. Duintjer Tebbens RJ, Pallansch MA, Kew OM, Sutter RW, Aylward RB, Watkins M, Gary H, Alexander J, Jafari H, Cochi SL, Thompson KM. Uncertainty and sensitivity analyses of a decision analytic model for post-eradication polio risk management. *Risk Analysis* 2008;28(4):855-876.
14. Thompson KM, Duintjer Tebbens RJ. The case for cooperation in managing and maintaining the end of poliomyelitis: Stockpile needs and coordinated OPV cessation. *The Medscape Journal of Medicine* 2008;10(8):190.
15. Thompson KM, Duintjer Tebbens RJ. Using system dynamics to develop policies that matter: Global management of poliomyelitis and beyond. *System Dynamics Review* 2008;24(4):433-449.
16. Duintjer Tebbens RJ, Thompson KM. Priority shifting and the dynamics of managing eradicable infectious diseases. *Management Science*. 2009;55(4):650-663.
17. Duintjer Tebbens RJ, Pallansch MA, Alexander J, Thompson KM. Optimal vaccine stockpile design for an eradicated disease: Application to polio. *Vaccine* 2010;28(26):4312-4327.

18. Rahmandad H, Hu K, Duintjer Tebbens RJ, Thompson KM. Development of an individual-based model for polioviruses: Implications of the selection of network type and outcome metrics. *Epidemiology and Infection* 2011;139(6):836-848.
19. Duintjer Tebbens RJ, Pallansch MA, Cochi SL, Wassilak SGF, Linkins J, Sutter RW, Aylward B, Thompson KM. Economic analysis of the Global Polio Eradication Initiative. *Vaccine* 2011;29(2):334-343.
20. Thompson KM, Wallace GS, Duintjer Tebbens RJ, Smith PJ, Barskey AE, Pallansch MA, Gallagher KM, Alexander JP, Armstrong GL, Cochi SL, Wassilak SGF. Trends in the risk of U.S. polio outbreaks and poliovirus vaccine availability for response. *Public Health Reports* 2012;127(1):23-37.
21. Thompson KM, Duintjer Tebbens RJ. Current polio global eradication and control policy options: Perspectives from modeling and prerequisites for OPV cessation. *Expert Review of Vaccines* 2012; 11(4):449-459.
22. Kalkowska DA, Duintjer Tebbens RJ, Thompson KM. The probability of undetected wild poliovirus circulation after apparent global interruption of transmission. *American Journal of Epidemiology* 2012; 175(9):936-949.
23. Schaetti C, Weiss MG, Ali SM, Chagnat C-L, Khatib AM, Reyburn R, Duintjer Tebbens RJ, Hutubessy RC. Costs of illness due to cholera, costs of immunization and cost-effectiveness of an oral cholera mass vaccination campaign in Zanzibar. *PLoS Neglected Tropical Diseases* 2012; 6(10):e1844.
24. Thompson KM, Duintjer Tebbens RJ. Development of investment cases for globally-coordinated management of infectious diseases. *Journal of Vaccines and Vaccination* 2012;3(8):164.
25. Thompson KM, Pallansch MA, Duintjer Tebbens RJ, Wassilak SGW, Kim J-H, Cochi SL. Pre-eradication vaccine policy options for poliovirus infection and disease control. *Risk Analysis* 2013; 33(4): 516-543.
26. Duintjer Tebbens RJ, Pallansch MA, Chumakov KM, Halsey NA, Hovi T, Minor PD, Modlin JF, Patriarca PA, Sutter RW, Wright PF, Wassilak SGF, Cochi SL, Kim J-H, Thompson KM. Expert review on poliovirus immunity and transmission. *Risk Analysis* 2013; 33(4): 544-605.
27. Duintjer Tebbens RJ, Pallansch MA, Chumakov KM, Halsey NA, Hovi T, Minor PD, Modlin JF, Patriarca PA, Sutter RW, Wright PF, Wassilak SGF, Cochi SL, Kim J-H, Thompson KM. Review and assessment of poliovirus immunity and transmission: Synthesis of knowledge gaps and identification of research needs. *Risk Analysis* 2013; 33(4): 606-646.
28. Thompson KM, Duintjer Tebbens RJ, Pallansch MA, Wassilak SGW, Cochi SL. Modeling population immunity to support efforts to end the transmission of live polioviruses. *Risk Analysis* 2013; 33(4): 647-663.
29. Duintjer Tebbens RJ, Pallansch MA, Kim J-H, Burns CC, Kew OM, Oberste MS, Diop O, Wassilak SGF, Cochi SL, Thompson KM. Review: Oral poliovirus vaccine evolution and insights relevant to modeling the risks of circulating vaccine-derived polioviruses (cVDPVs). *Risk Analysis* 2013; 33(4): 680-702.
30. Duintjer Tebbens RJ, Pallansch MA, Kalkowska DA, Wassilak SGF, Cochi SL, Thompson KM. Characterizing poliovirus transmission and evolution: Insights from modeling experiences with wild and vaccine-related polioviruses. *Risk Analysis* 2013; 33(4): 703-749.

31. Thompson KM, Duintjer Tebbens RJ, Chaignat C-L, Hill A, Badizadegan K, Costa AJ, Namgyal P, Hutubessy RC. Managing cholera as a preventable global threat. *Journal of Vaccines and Vaccination* 2013;4(3):183.
32. Thompson KM, Duintjer Tebbens RJ. National choices related to inactivated poliovirus vaccine, innovation, and the end game of global polio eradication. *Expert Review of Vaccines* 2013;13(2):221-234.
33. Duintjer Tebbens RJ, Kalkowska DA, Wassilak SGF, Pallansch MA, Cochi SL, Thompson KM. The potential impact of expanding target age groups for polio immunization campaigns. *BMC Infectious Diseases* 2014;14:45.
34. Kalkowska DA, Duintjer Tebbens RJ, Thompson KM. Modeling strategies to increase population immunity and prevent poliovirus transmission in two high-risk areas in northern India. *Journal of Infectious Diseases; Journal of Infectious Disease* 2014;210(Suppl 1):S398-S411.
35. Kalkowska DA, Duintjer Tebbens RJ, Thompson KM. Modeling strategies to increase population immunity and prevent poliovirus transmission in the high-risk areas of northwestern Nigeria. *Journal of Infectious Diseases; Journal of Infectious Disease* 2014;210(Suppl 1):S412-S423.
36. Kisjes KH, Duintjer Tebbens RJ, Wallace GS, Pallansch MA, Cochi SL, Wassilak SGF and Thompson KM. Individual-based modeling of potential poliovirus transmission in connected religious communities in North America with low uptake of vaccination. *Journal of Infectious Diseases; Journal of Infectious Disease* 2014;210(Suppl 1):S424-S433.
37. Thompson KM, Duintjer Tebbens RJ. Modeling the dynamics of oral poliovirus vaccine cessation. *Journal of Infectious Diseases; Journal of Infectious Disease* 2014;210(Suppl 1):S475-S484.
38. Duintjer Tebbens RJ, Thompson KM. Modeling the potential role of inactivated poliovirus vaccine to manage the risks of oral poliovirus vaccine cessation. *Journal of Infectious Diseases; Journal of Infectious Disease* 2014;210(Suppl 1):S485-S497.
39. Thompson KM, Duintjer Tebbens RJ, Pallansch MA, Wassilak SGF, Cochi SL. Polio eradicators use integrated analytical models to make better decisions. *Interfaces* 2015;45(1):5-25.
40. Kalkowska DA, Duintjer Tebbens RJ, Pallansch MA, Cochi SL, Wassilak SGF, Thompson KM. Modeling undetected live poliovirus circulation after apparent interruption of transmission: Implications for surveillance and vaccination. *BMC Infectious Diseases* 2015;15(66).
41. Thompson KM, Kalkowska DA, Duintjer Tebbens RJ. Managing population immunity to reduce or eliminate the risks of circulation following the importation of live polioviruses. *Vaccine* 2015;33(3):1568-1577.
42. Kalkowska DA, Duintjer Tebbens RJ, Grotto I, Shulman L, Anis E, Wassilak SGF, Pallansch MA, Thompson KM. Modeling options to manage type 1 wild poliovirus imported into Israel in 2013. *Journal of Infectious Diseases* 2015;211(11):1800-1812.
43. Duintjer Tebbens RJ, Pallansch MA, Wassilak SGF, Cochi SL, Thompson KM. Combinations of quality and frequency of immunization activities to stop and prevent poliovirus transmission in the high-risk area of northwest Nigeria. *PLoS One* 2015;10(6):e0130123.
44. Thompson KM, Duintjer Tebbens RJ: Health and economic consequences of different options for timing the coordinated global cessation of the three oral poliovirus vaccine serotypes. *BMC Infectious Diseases* 2015;15:376.

45. Thompson KM, Duintjer Tebbens RJ: The differential impact of oral poliovirus vaccine formulation choices on type-specific population immunity to poliovirus transmission. *BMC Infectious Diseases* 2015;15:374.
46. Duintjer Tebbens RJ, Thompson KM: Managing the risk of circulating vaccine-derived poliovirus during the endgame: Oral poliovirus vaccine needs. *BMC Infectious Diseases* 2015;15:379.
47. Duintjer Tebbens RJ, Pallansch MA, Cochi SL, Wassilak SGF, Thompson KM: An economic analysis of poliovirus risk management policy options for 2013-2052. *BMC Infectious Diseases* 2015;15:389.
48. Duintjer Tebbens RJ, Thompson KM: Managing the risk of circulating vaccine-derived poliovirus during the endgame: Oral poliovirus vaccine needs. *BMC Infectious Diseases* 2015;15:390.
49. Duintjer Tebbens RJ, Pallansch MA, Wassilak SGF, Cochi SL, Thompson KM: Characterization of outbreak response strategies and potential vaccine stockpile needs for the polio endgame. *BMC Infectious Diseases* 2016;16:137.
50. Duintjer Tebbens RJ, Hampton LM, Thompson KM: Implementation of coordinated global serotype 2 oral poliovirus vaccine cessation: Risks of inadvertent trivalent oral poliovirus vaccine use. *BMC Infectious Diseases* 2016;16:231.
51. Duintjer Tebbens RJ, Hampton LM, Thompson KM: Implementation of coordinated global serotype 2 oral poliovirus vaccine cessation: Risks of potential non-synchronous cessation. *BMC Infectious Diseases* 2016;16:237.
52. Thompson KM, Duintjer Tebbens RJ. Framework for optimal global vaccine stockpile design for vaccine-preventable diseases: Application to measles and cholera vaccines as contrasting examples. *Risk Analysis* 2016;36(7):1487-1509.
53. Duintjer Tebbens RJ, Thompson KM. Uncertainty and sensitivity analysis of cost assumptions for global long-term poliovirus risk management. *Journal of Vaccines and Vaccination* 2016;7(5):339.
54. Duintjer Tebbens RJ, Hampton LM, Wassilak SGF, Pallansch MA, Cochi SL, Thompson KM. Maintenance and intensification of bivalent oral poliovirus vaccine use prior to its coordinated global cessation. *Journal of Vaccines and Vaccination* 2016;7(5):340.
55. Duintjer Tebbens RJ, Thompson KM. The potential benefits of a new poliovirus vaccine for long-term poliovirus risk management. *Future Microbiology* 2016;11(12):1549-1561.
56. Duintjer Tebbens RJ, Thompson KM. Comprehensive screening for immunodeficiency-associated vaccine-derived poliovirus: an essential OPV cessation risk management strategy. *Epidemiology and Infection* 2017;145(2):217-226.
57. Duintjer Tebbens RJ, Thompson KM. Costs and benefits of including inactivated in addition to oral poliovirus vaccine in outbreak response after cessation of oral poliovirus vaccine use. *Medical Decision Making Policy & Practice* 2017;2:1-13.
58. Duintjer Tebbens RJ, Thompson KM. Poliovirus vaccination during the endgame: Insights from integrated modeling. *Expert Review of Vaccines* 2017;16(6):577-586.
59. Duintjer Tebbens RJ, Thompson KM. Modeling the costs and benefits of temporary recommendations for poliovirus exporting countries to vaccinate international travelers. *Vaccine* 2017;35(31):3823-3833.
60. Thompson KM, Duintjer Tebbens RJ. Lessons from globally-coordinated cessation of serotype 2 oral poliovirus vaccine for the remaining serotypes. *Journal of Infectious Diseases* 2017;216(Suppl 1):S168-S175.

61. Thompson KM, Duintjer Tebbens RJ. Lessons from the polio endgame: Overcoming the failure to vaccinate and the role of subpopulations in maintaining transmission. *Journal of Infectious Diseases* 2017;216(Suppl 1):S176-S182.
62. Duintjer Tebbens RJ, et al. Insights from a systematic search for information on designs, costs, and effectiveness of poliovirus environmental surveillance systems. *Food and Environmental Virology* 2017;9(4):361-382.
63. Duintjer Tebbens RJ, Hampton LM, Thompson KM. Planning for globally coordinated cessation of bivalent oral poliovirus vaccine: Risks of non-synchronous cessation and unauthorized oral poliovirus vaccine use. *BMC Infectious Diseases* 2018;18:165.
64. Levy JL, Woo MK, Duintjer Tebbens RJ, Nishioka Y. Emissions payback periods for increased residential insulation using marginal electricity modeling: A life cycle approach. *The International Journal of Life Cycle Assessment*. *In press*.  
<https://doi.org/10.1007/s11367-017-1412-x>
65. Duintjer Tebbens RJ, Pallansch MA, Cochi SL, Ehrhardt D, Farag NH, Hadler S, Hampton LM, Martinez M, Wassilak SGF, Thompson KM: Modeling poliovirus transmission in Pakistan and Afghanistan to inform vaccination strategies in under-vaccinated subpopulations. *Risk Analysis*. *In press*. doi: 10.1111/risa.12962
66. Duintjer Tebbens RJ, Thompson KM. Using integrated modeling to support the global eradication of vaccine-preventable diseases. *System Dynamics Review*. *In press*.  
<https://doi.org/10.1002/sdr.1589>

### **Book chapters:**

Thompson KM, Duintjer Tebbens RJ. Economic evaluation of the benefits and costs of disease elimination and eradication initiatives. In: Cochi SL, Dowdle WR, editors. *Disease Eradication in the 21st Century: Implications for Global Health*. Cambridge, MA: MIT Press, 2011: 115-130

### **Peer-reviewed Contract Research Reports:**

Duintjer Tebbens RJ, Simons EA, Crowcroft N, Kurowicka D, Burton AH, Hutubessy RC, Strebel, PM. Final Report: Global Pertussis Burden Expert Elicitation. World Health Organization, Geneva, Switzerland, 2011

### **Invited articles and editorials:**

Duintjer Tebbens RJ. Wiskunde en de paradox van rationele vaccinatiebeslissingen. [Mathematics and the paradox of rational vaccination decisions]. *MaCHazine* 2010;14(3):30-31  
MaCHazine is the journal of the Study Society *Christiaan Huygens* of Applied Mathematics and Computer Science at TU Delft.

Smit Sibinga CT, Duintjer Tebbens RJ. End polio now – het laatste zetje. [End polio now – the final push]. *De Rotarian* February 2011: 80(4):10-12. *De Rotarian* is the official magazine of the Dutch chapter of Rotary International.

Thompson KM, Duintjer Tebbens RJ. How should we prepare for an outbreak of reintroduced live polio viruses? *Future Virology* 2017;12(2):41-443.

## **TEACHING EXPERIENCE:**

- 2010- Occasional guest lectures at graduate seminars, school symposia, and educational after-school programs
- 2009-2010 Assistant Professor. Course Director for Decision Theory and Expert Judgment; Course Director for Decision Analysis; Instructor for Calculus for Aerospace Engineering; Instructor for mathematics module in Product in Action for Industrial Engineering; Instructor for Statistics for Architecture
- 1998-2008 Teaching assistant: helped to teach various courses and workshops, and mentored individual students.

## **RESEARCH SUPERVISION:**

### **Post-doctoral Researcher, Research Supervisor**

- Jong-Hoon Kim, 2010-2012, Kid Risk, Inc., Boston, MA
- Marita Zimmermann, 2016, Kid Risk, Inc., USA

### **Doctoral Candidate, Research Supervisor**

- Dominika A. Kalkowska, 2011-2014, TU Delft, The Netherlands

### **Master's Theses, Research Supervisor**

- Dominika Kalkowska. Master thesis: Polio Eradication: A Stochastic Approach to Modeling Hidden Circulation of Wild Poliovirus. Delft University of Technology, September 2010
- Palidan Wubulihassimu. Master thesis: Modeling the Transmission Dynamics of Cholera Outbreaks and the Potential Use of Oral Cholera Vaccines to Control Outbreaks. Delft University of Technology, September 2010

### **Bachelor Thesis, Research Supervisor**

- Kasper Kisjes. Bachelor thesis: Individual-Based Modeling of Potential Poliovirus Transmission in a Religious Community. Delft University of Technology, August 2010

## **SELECTED INVITED PRESENTATIONS:**

Duintjer Tebbens RJ. Dynamic cost-effectiveness analyses for vaccine interventions. Bi-annual Advisory Committee Meeting of the Harvard Center for Risk Analysis, Boston, MA, June 2001.

Duintjer Tebbens RJ, Pallansch MA, Kew OM, Cáceres VM, Jafari H, Cochi SL, Aylward RB, Thompson KM. A dynamic approach to cost-effectiveness analysis for vaccine interventions: Retrospective case study on polio. Society for Risk Analysis, Seattle, WA, December 2001 and CDC, December 5, 2001.



Duintjer Tebbens RJ, Thompson KM. A dynamic approach to cost-effectiveness analysis for vaccine interventions: Retrospective case study on polio. Harvard School of Public Health, Harvard Center for Risk Analysis Research Seminar, Boston, MA, December 2001.

Duintjer Tebbens, RJ. Dynamics and sensitivities in cost-effectiveness analyses for vaccine interventions: A retrospective case study on polio vaccinations in the USA. Delft University of Technology, Computer Science, Operations Research and Risk Analysis Colloquium, Delft, Netherlands, March 2002.

Duintjer Tebbens RJ, Thompson KM. Decision analytic research on polio risk management policies. Pan American Health Organization, Washington, DC, May 2004.

Duintjer Tebbens RJ, Thompson KM. Decision analysis of post-certification polio eradication policies. National Immunization Program Seminar, Centers for Disease Control and Prevention, Atlanta, GA, August 2004.

Thompson KM, Duintjer Tebbens RJ, Andrus JK, and Landaverde M. Using decision analysis to support future PAHO polio vaccination policies. XVI Reunión del Grupo Técnico Asesor sobre Enfermedades Prevenibles por Vacunación, Organización Panamericana de la Salud, Mexico City, Mexico, November 2004 (Presentation by Thompson KM).

Duintjer Tebbens RJ, Thompson KM. Dynamic decision models: Sensitivity analysis and polio case study. MIT-U Albany System Dynamics Student Colloquium, Cambridge, MA, April 2005.

Duintjer Tebbens RJ. Sensitivity analysis methods for an economic evaluation model of a vaccination program. Delft University of Technology, Risk and Environmental Modeling Colloquium, Delft, Netherlands, April 2005.

Thompson KM, Duintjer Tebbens RJ. Modeling global policy for managing polioviruses: An analytical journey. Proceedings of the 23<sup>rd</sup> International Conference of the System Dynamics Society, Boston, MA, July 2005 (Plenary oral presentation by Thompson KM).

Duintjer Tebbens RJ, Thompson KM, Hunink MGM, Mazzuchi TM, Lewandowski D, Kurowicka D, Cooke RM. Methods to analyze and quantify uncertainty and sensitivity in mathematical models to aid decision making in health and medicine. Society for Medical Decision Making, Cambridge, MA, October 2006 (Poster) and Society for Risk Analysis, Baltimore, MD, December 2006 (Poster).

Duintjer Tebbens RJ, Thompson KM. The probability and consequences of polio outbreaks after eradication. Society for Risk Analysis, Baltimore, MD, December 2006.

Thompson KM, Duintjer Tebbens RJ. Eradication versus control for poliomyelitis: An economic analysis. WHO Urgent Stakeholder Consultation, World Health Organization, Geneva, Switzerland, February 2007 (Presented by Thompson KM).

Duintjer Tebbens RJ. Priority shifting and the dynamics of managing eradicable infectious diseases. System Dynamics Faculty Search Seminar. MIT Sloan School of Management, January 11, 2008.

Thompson KM, Duintjer Tebbens RJ. Using system dynamics to develop policies that matter: Global management of poliomyelitis and beyond. 26<sup>th</sup> International Conference of the System Dynamics Society, Athens, Greece, July 2008 (Plenary oral presentation by Thompson KM).

Duintjer Tebbens RJ. The role of mental and mathematical models in the debate of control vs. eradication of diseases. Risk and Environmental Modeling Colloquium, Delft Institute of Applied Mathematics, Delft University of Technology, Delft, Netherlands, February 2009.

Duintjer Tebbens RJ. The role of mental and mathematical models in the debate of control vs. eradication of diseases. Policy Analysis Lunch Lecture, Technology Policy and Management, Delft University of Technology, Delft, Netherlands, April 2009.

Duintjer Tebbens RJ, Thompson KM. Modeling the economics of policies following eradication of wild polioviruses. Meeting of the Quantitative Immunization and Vaccines Related Research (QUIVER) Advisory Committee. World Health Organization, Geneva, Switzerland, October 2009.

Duintjer Tebbens RJ, Thompson KM. The impact of feedbacks, delays, and perceptions on the management of competing disease priorities. Society for Risk Analysis, Baltimore, MD, December 2009.

Thompson KM, Duintjer Tebbens RJ. Uncertainty, variability, and time: Adding dynamics to address real policy issues with respect to global polio risk management. Society for Risk Analysis, Baltimore, MD, December 2009 (Presentation by Thompson KM).

Duintjer Tebbens RJ, Kanczurzevska E, Kurowicka D, and Cooke RM. Experts in R: Evaluating the implementation in R of the Classical Model for combining subjective assessments. Subjective Bayes Workshop at the University of Warwick, Coventry, UK, December 2009 (Poster).

Duintjer Tebbens RJ. Theoretical framework for stockpile optimization. Immunization, Vaccines and Biologicals Division, World Health Organization, Geneva, Switzerland, December 2009.

Thompson KM, Duintjer Tebbens RJ. Economic analysis of the GPEI. Core Donor Meeting of the Global Polio Eradication Initiative, World Health Organization, Geneva, Switzerland, February 2010 (Presentation by Thompson KM).

Duintjer Tebbens RJ. Polio eradication and beyond – a journey in modeling for public health. Guest lecture, Advanced System Dynamics course, Faculty of Technology, Policy and Management, TU Delft, February 2010.

Duintjer Tebbens RJ. The role of system dynamics models in the debate of control vs. eradication of polio. Probability and Statistics Seminar, Delft Institute of Applied Mathematics, Delft University of Technology, Delft, Netherlands, April 2010.

Duintjer Tebbens RJ. Mathematics and the paradox of rational vaccination decisions. Lunch lecture of Applied Mathematics and Computer Science Study Society Christiaan Huygens, Delft University of Technology, Delft, May 2010.

Duintjer Tebbens RJ. The economics of the global polio eradication initiative (GPEI). Launch of the Global Polio Eradication Strategic Plan 2010-2012, World Health Organization, Geneva, June 2010.

Duintjer Tebbens RJ. Vaccine stockpile dynamics and optimization – application to cholera and polio. Benelux Chapter Meeting of the System Dynamics Society -- System Dynamics and Health Care, Faculty of Technology, Policy and Management, TU Delft, December 2 2010

Duintjer Tebbens RJ. The role of mental and mathematical models in the debate of control vs. eradication of diseases. Institute on Systems Science and Health, Pittsburgh, PA, May 24, 2011

Duintjer Tebbens RJ. Components of an OCV reserve and stockpile framework. WHO Consultation on Oral Cholera Vaccine (OCV) Stockpile Strategic Framework: Potential Objectives and Possible Policy Options. World Health Organization, Geneva, Switzerland, September 6-7, 2011.

Duintjer Tebbens RJ. Pertussis expert elicitation – methods and procedures. Meeting of the Quantitative Immunization and Vaccines Related Research (QUIVER) Advisory Committee. World Health Organization, Geneva, Switzerland, October 2011.

Duintjer Tebbens RJ, Thompson KM, Kim JH, Pallansch MA, Wassilak SGW, Cochi SL. Modeling and managing VDPV risks: What we know and what we don't know. Vaccine-derived polioviruses (VDPVs): Ad-hoc meeting of scientific steering committee, World Health Organization, Geneva, Switzerland, February 7-8, 2012.

Duintjer Tebbens RJ, Thompson KM. Priorities for VDPV risk modeling and decision options. Vaccine-derived polioviruses (VDPVs) and their implications: State of the Art. World Health Organization, Geneva, Switzerland, May 30 – June 1, 2012.

Duintjer Tebbens RJ, Thompson KM. Role of modeling in determining and assessing potential uses of polio antivirals. 11<sup>th</sup> Meeting of the Polio Antiviral Initiative Steering Committee, Decatur, GA, December 10 – 11, 2012.

Thompson KM, Duintjer Tebbens RJ. Accelerating interruption of WPV transmission. Centers for Disease Control and Prevention and Bill & Melinda Gates Foundation Polio Modeling Meeting, Atlanta, GA, January 29-30, 2013 (co-presenter Thompson KM).

Thompson KM, Duintjer Tebbens RJ. cVDPV risk mitigation and management. Centers for Disease Control and Prevention and Bill & Melinda Gates Foundation Polio Modeling Meeting, Atlanta, GA, January 29-30, 2013 (co-presenter Thompson KM).

Duintjer Tebbens RJ, Thompson KM. Modeling the potential role of polio antiviral compounds. Centers for Disease Control and Prevention and Bill & Melinda Gates Foundation Polio Modeling Meeting, Atlanta, GA, January 29-30, 2013.

Duintjer Tebbens RJ, Thompson KM. The importance of data to model and manage population immunity. Informal Consultation with Partners on Immunization Data, WHO Office of the African Region, Brazzaville, Republic of Congo, February 14-15, 2013.

Duintjer Tebbens RJ, Thompson KM. Using modeling tools to improve health in Africa. Regional Director's Briefing, WHO Office of the African Region, Brazzaville, Republic of Congo, February 15, 2013.

Duintjer Tebbens RJ, Thompson KM. Current polio modeling work by Kid Risk. World Health Organization, Geneva, Switzerland, April 10, 2013.

Duintjer Tebbens RJ, Thompson KM. Kid Risk Update on modeling results using AFRO data – Expanded age groups campaigns in NW Nigeria, Monthly African Region Data Conference (teleconference), December 5, 2013.

Thompson KM, Duintjer Tebbens RJ, Pallansch MA, Wassilak SGF, Cochi SL. Polio eradicators use integrated analytical models to make better decisions. INFORMS Conference on Business Analytics & Operations Research, Boston MA, March 31 (2014 Franz Edelman Competition Presentation) and April 1 (Keynote: 2014 Edelman Winner Reprise Presentation), 2014; and INFORMS Annual Meeting, San Francisco, CA, November 10, 2014 (Keynote: 2014 Edelman Winner Reprise Presentation)

Duintjer Tebbens RJ, Thompson KM. Using integrated system dynamics and other analytical tools to help inform polio eradication endgame policies. MIT System Dynamics Group Lunch Seminar, Cambridge, MA, May 6, 2014.

Duintjer Tebbens RJ, Thompson KM. Using integrated analytical tools to help inform polio eradication endgame policies. Policy Informatics Workshop, Center for Technology in Government, University at Albany, Albany, NY, May 9, 2014.

Duintjer Tebbens RJ, Thompson KM. Kid Risk Perspectives on Polio Modeling. MIDAS Center for Inference and Dynamics of Infectious Diseases (CIDID) Polio Endgame Modelling Workshop. Seattle, July 1 and 2, 2015 (co-presenter Thompson KM)..

Thompson KM, Kisjes KH, Duintjer Tebbens RJ. Characterization of the impacts of heterogeneity in high-risk populations for infectious disease transmission: Modeling polio and measles in the North American Amish. Proceedings of the 33<sup>rd</sup> International Conference of the System Dynamics Society, Cambridge, MA, July 19-23, 2015 (Oral presentation by Thompson KM).

Duintjer Tebbens RJ, Thompson KM. Duintjer Tebbens RJ. On the characterization of censored survival curves in system dynamic models. Proceedings of the 33<sup>rd</sup> International Conference of the System Dynamics Society, Cambridge, MA, July 19-23, 2015 (oral presentation).

Duintjer Tebbens RJ, Pallansch MA, Thompson KM. Modeling the iVDPV risk in the Endgame. Stakeholder's meeting: Polio Surveillance among Children with Primary Immunodeficiency (iVDPV Excretors), World Health Organization, Geneva, Switzerland, July 28-29, 2015; 16<sup>th</sup> Meeting of the Polio Antiviral Initiative Steering Team, Decatur, GA, January 15, 2016; Polio Antivirals Initiative Meeting, Bill and Melinda Gates Foundation, Seattle, WA, February 29, 2016.

Thompson KM, Duintjer Tebbens RJ. Kid Risk Research: Update and Insights. World Health Organization, Geneva, Switzerland, July 27, 2015 (co-presenter Thompson KM).

Duintjer Tebbens RJ, Thompson KM. Managing risks associated with the tOPV-bOPV switch and beyond: insights from integrated modeling. Global Immunization Division Seminar, Centers for Disease Control and Prevention, Atlanta, GA, September 2015.

Duintjer Tebbens RJ and Thompson KM. VDPV Risks and Serotype 2 Outbreak Response. SAGE Polio Workgroup Pre-meeting, World Health Organization, Geneva, Switzerland, January 18, 2016.

Duintjer Tebbens RJ. Polio – almost gone but not forgotten. Technical Innovator Microbiology Class, Innovation Institute, Newton, MA, February 2, 2016.

Duintjer Tebbens RJ. Using modeling to help eradicate a disease. Spring Innovator Symposium, Acera School, Winchester, MA, April 23, 2016.

Duintjer Tebbens RJ and Thompson KM. Kid Risk Perspective about Expansion of Global Environmental Surveillance. Environmental Surveillance Implementation Task Team Face-to-face Meeting, World Health Organization, Geneva, Switzerland, August 8, 2016.

Duintjer Tebbens RJ and Cleary J. Medical innovations (using models to help eradicate diseases). Acera Innovator Symposium, Acera School, Winchester, MA, October 20, 2016.

Duintjer Tebbens RJ and Thompson KM. Modeling OPV cessation risks and outbreak response strategies. Cessation Risk Task Team 6-Month Post-Switch Review Meeting, London, UK, November 17-18, 2016.

Duintjer Tebbens RJ and Thompson KM. New tools: nOPV and antivirals. Cessation Risk Task Team 6-Month Post-Switch Review Meeting, London, UK, November 17-18, 2016.

Duintjer Tebbens RJ and Thompson KM. Update on modeling of the iVDPV risk. 17<sup>th</sup> Meeting of the Polio Antiviral Initiative Steering Team, Decatur, GA, December 2, 2016.

Duintjer Tebbens RJ and Thompson KM. Cost of polio surveillance and laboratory network. Technical Meeting on Costing Surveillance, Geneva, Switzerland, December 7-8, 2016.

Duintjer Tebbens RJ and Thompson KM. Polio eradication and the role of subpopulations for risk management. Society for Risk Analysis Annual Meeting, San Diego, CA, December 11-15, 2016.

Duintjer Tebbens RJ and Thompson KM. Modeling the costs and benefits of temporary recommendations for poliovirus exporting countries to vaccinate international travelers. Ad-hoc meeting of the International Health Regulations Emergency Committee, March 10, 2017. (teleconference).

Duintjer Tebbens RJ and Thompson KM. Modeling polio in Pakistan and Afghanistan. SIR Polio Seminar, Centers for Disease Control and Prevention, Atlanta, GA, May 12, 2017.

Duintjer Tebbens RJ and Thompson KM. Insights from modeling OPV2 cessation and outbreak response strategies. Cessation Risk Task Team 12-Month Post-Switch Review Meeting, Atlanta, GA, June 13, 2017.

Duintjer Tebbens RJ and Thompson KM. Evaluation of risks and vaccine needs for bOPV cessation. Cessation Risk Task Team 12-Month Post-Switch Review Meeting, Atlanta, GA, June 14, 2017.

Duintjer Tebbens RJ and Thompson KM. Using integrated modeling to support the global eradication of vaccine-preventable diseases. Plenary presentation at the 35<sup>th</sup> International Conference of the System Dynamics Society, Cambridge, MA, July 17, 2017.

Duintjer Tebbens RJ and Thompson KM. Kid Risk update on environmental surveillance work. Environmental Surveillance Implementation Working Group 4th face-to-face, London, UK, October 12-13, 2017

Duintjer Tebbens RJ and Thompson KM. Kid Risk OPV2 cessation modeling update. Cessation Risk Task Team 18-Month Post-Switch Review Meeting, Geneva, Switzerland, February 1, 2018.

Duintjer Tebbens RJ and Thompson KM. Kid Risk OPV1 and OPV3 cessation modeling update. Cessation Risk Task Team 12-Month Post-Switch Review Meeting, Geneva, Switzerland, February 2, 2018.

#### **PROFESSIONAL MEMBERSHIPS:**

Society for Risk Analysis  
System Dynamics Society  
INFORMS

## **LANGUAGES:**

Dutch – native  
English – fluent  
French – very good  
German – good  
Spanish – conversational

## **PROFESSIONAL SERVICE:**

### Committee Memberships

2013-2015 World Health Organization African Regional Office Data Management Group  
2016-2018 Cessation Risk Task Team and sub-groups  
2016-2018 Environmental Surveillance Implementation: Modeling Representative and Working Subgroup on Human Resource Needs member

### Journal Article Reviews for

Applied Health Economics and Health Policy  
Asian Pacific Journal of Tropical Medicine  
Biology Letters  
BMC Infectious Diseases  
BMC Public Health  
Canadian Medical Association Journal  
Epidemiology and Infection  
Expert Review of Vaccines  
Health Economics  
Human Dimensions of Wildlife  
Indian Pediatrics  
Infection, Disease & Health  
International Journal of Environmental Research and Public Health  
International Journal of Preventive Medicine  
International Journal of Systems Science  
Journal of Rare Diseases Research & Treatment  
Journal of Tropical Diseases  
Journal of Theoretical Biology  
Medical Decision Making  
Pediatrics  
Rehabilitation Research and Practice  
Risk Analysis  
PLoS One  
PLoS Medicine  
System Dynamics Review  
System Dynamics Society International Conference Proceedings  
SpringerPlus  
Tropical Medicine and International Health  
Vaccine