	Epidemiology and public health	Managing disease spread	Resource planning & allocation, economics	Predicting drug effects	Risk assessment	Ecosystem management	Disaster and Emergency Response	Testing theory	Behavior modeling	Tools	Link	Summary of methods
Nathan Geffen	√										http://jasss.soc.surrey.ac.uk/20/4/8.html	Agent based modeling. matching algorithms, equation based models, microsimulation
Christopher Fonnesbeck	√	√								√	http://doi.org/10.7717/peerj-cs.55	MCMC, Baysian models, meta analysis, reinforcement learning
Dan Yamin	√	√	√	√							https://doi.org/10.1073/pnas.1522597113	Cost effectiveness, Markov chains, differential equations, game theory
Katherine Ogurtsova	√			√							http://ddz.uni-duesseldorf.de/en/	Cost effectiveness analysis
Jeff Shrager	√			√				√		√	https://arxiv.org/abs/1308.1066	Machine learning, Bayesian methods.
Feilim Mac Gabhann	√			√			√				https://www.ncbi.nlm.nih.gov/pubmed/2	Differential equations, optimization, population generation
Carl Asche	√		√		√						https://doi.org/10.22360/SummerSim.20	Cost effectiveness analysis
Michael Thomas	√							√			http://www.sciencedirect.com/science/ar	Machine learning, Genetic Algorithms
Marco Ajelli	√										https://journals.plos.org/ploscompbiol/ar	Agent based models, synthetic populations
Amit Huppert		√				√		√			http://dx.doi.org/10.1098/rsif.2015.0666	Predator prey models, Differential equations
Ram Pendyala			√					√		√	http://www.mobilityanalytics.org/popger	Population generation, microsimulation
Bishal Paudel				√							http://dx.doi.org/10.1002/jcp.24888	Differential equations, MCMC
Resit Akcakaya					√	√					http://life.bio.sunysb.edu/ee/akcakayalab	Coupled niche-demographic models, matrix population models, metapopulation models with dynamic spatial structure
Pawel Topa							√				http://dx.doi.org/10.1016/j.jocs.2016.07.1	Agent Based Modeling, Evolutionary Computations
Vivek Balaraman								√			http://ceur-ws.org/Vol-1561/paper2.pdf	Agent Based Modeling, surveys, serious games
Matthias Templ										√	https://cran.r-project.org/web/packages/s	Population generation, iterative proportional fitting
Leandro Watanabe										√	http://www.async.ece.utah.edu/ibiosim	SBML arrays, stochastic simulation
Robert Smith?	√	√		√							https://doi.org/10.1007/s00285-014-0816	Ordinary and impulsive differential equations, Latin hypercube sampling, Monte Carlo simulations
Bruce Y. Lee	√	√									https://doi.org/10.1136/amiajnl-2012-00	Agent-based models
Aristides Moustakas		√									https://link.springer.com/article/10.1007/	Agent-based models
Andreas Zeigler					√						https://doi.org/10.1007/s10654-014-995	Random forests, support-vector machines
M'elanie Prague	√	√		√							https://doi.org/10.1016/j.cmpb.2013.04.0	Ordinary differential equations with nonlinear mixed effect models, control theory
Romualdo Santos			√			√					https://escijournals.net/index.php/IJES/a	Differential equations, difference equations, Malthusian modelling
Matthias Chung								√			http://arxiv.org/abs/1509.06926	Robust and efficient point estimator methods for ordinary differential equations
Robin Gras						√		√			https://doi.org/10.1162/artl.2009.Gras.01	Agent-based models, fuzzy cognitive maps
Valery Forbes					√			√			https://doi.org/10.1897/08-029.1	Matrix population models, individual-based population models, dynamic energy budgets, mechanistic effect models
Sixten Borg	√		√	√							http://swopec.hhs.se/lunewp/abs/lunewp	Finite mixtures of disease activity models, cost-effectiveness analysis
Tracy Comans			√								https://doi.org/10.1007/s10198-015-0756	Discrete-event simulation of health services, cost-effectiveness analysis
Yifei Ma	√	√	√								https://doi.org/10.1145/2501602	Network models, database simulation, diffusion dynamics, multi-theory methodology
Nieko Punt				√							http://www.medimatics.net/projects/obis	Pharmacokinetics/pharmacodynamics modelling, two-stage Bayesian parameter estimation
William Jusko							√				https://dx.doi.org/10.1007%2Fs00280-01	Pharmacokinetics/pharmacodynamics modelling, ordinary differential equations
Lucas Brotz						√		√			https://doi.org/10.1007/s10750-012-1035	Fuzzy logic analysis of population dynamics to investigate trends
Ayaz Hyder	√	√	√		√		√				https://doi.org/10.1016/j.epidem.2015.03	Agent-based models, microsimulation models, cost-effectiveness analysis, computational exposure science
Olaf Dammann	√										https://doi.org/10.1055/s-0031-1283157	computational modeling of individual entities
Sergey Nuzhdin								√		√	https://dx.doi.org/10.1086%2F681084	Bayesian Modeling, Spacial tracking
Jacob Barhak	√									√	https://simtk.org/projects/therefmodel	Microsimulation, Monte Carlo Simulation, Evolutionary Computation, Optimization, High Performance Computing
Atesmachew B Hailegiorgis		√					√				http://www.sciencedirect.com/science/ar	Agent Based Modeling
Shweta Bansal	√							√			http://dx.doi.org/10.1098/rsif.2007.1100	network epidemic models
Steve Leff			√					√			http://model.planningbythenumbers.org/	Markov Models, Optimization
Joshua G. Behr			√			√		√			https://doi.org/10.1097/PHH.0b013e318	decision calculus
C. Anthony Hunt	√			√							http://dx.doi.org/10.1371/journal.pone.0	Agent Based Modeling
Talitha Feenstra	√		√		√						http://dx.doi.org/10.1016/j.jval.2011.06.0	Markov Models
Madhav Marathe	√	√				√					http://www.vbi.vt.edu/ndssl	Synthetic Populations
Mary Butler	√				√						http://www.ncbi.nlm.nih.gov/books/NB8	Big Data
Bradley Davidson	√										http://dx.doi.org/10.1007/s10439-014-11	Monte Carlo Simulation, Individual Simulation
Paul Marjoram	√										https://dx.doi.org/10.1016%2Fj.ijbi.2014	Agent Based Modeling
Stefan Scholz	√	√						√			http://silas-model.com/	Agent Based Modeling, Population Generation
Jonathan Karnon	√		√								https://doi.org/10.1177/0272989X13478	Discrete Event Simulation
Aaron Garrett										√	https://pythonhosted.org/inspyred/overvi	Evolutionary Computation
Wojciech (Al) Chrosny	√									√	http://www.treeage.com/articles/markov-	Individual based Markov Model, Discrete Event Simulation
Samarth Swarup		√				√		√			https://www.ncbi.nlm.nih.gov/pubmed/2	Agent Based Modeling
Naren Ramakrishnan	√					√					http://dx.doi.org/10.1145/2623330.2623	Event modeling according to open source sources such as news, blogs, tweets, and economic indicators
Cristina Lanzas	√	√									http://dx.doi.org/10.1016/j.prevetmed.20	Models that capture realistic exposure patterns and include spatial features
Amiyaal Ilany								√			http://dx.doi.org/10.1371/journal.pone.0	Agent Based Modeling
Jason Walonoski	√									√	https://synthetichealth.github.io/synthea	Population Generation, event modeling, Intercae with medical standards
Paul Grouchy							√	√			https://www.nature.com/articles/srep346	Evolutionary Computation, Symbolic Communication