Publications:

Development of a restricted state space stochastic differential equation model for bacterial growth in rich media
Publication: Research - peer-review › Journal article – Annual report year: 2012

Nonlinear Stochastic Modelling of Antimicrobial resistance in Bacterial Populations
Publication: Research › Ph.D. thesis – Annual report year: 2010

Modelling conjugation with stochastic differential equations
Publication: Research - peer-review › Journal article – Annual report year: 2010

Dynamics of extended-spectrum beta-lactamases in Escherichia coli: a mathematical model
Publication: Research - peer-review › Poster – Annual report year: 2009

Dynamics of spread of intestinal colonization with extended-spectrum beta-lactamases in E.coli: a mathematical model
Publication: Research › Report – Annual report year: 2009

Modelling bacterial growth in rich media with a non-parametric extension to an SDE based Model
Publication: Research - peer-review › Journal article – Annual report year: 2009

Parameter estimation for a discrete stochastic model of ESBL colonization in a human population
Publication: Research › Sound/Visual production (digital) – Annual report year: 2009

Mathematical model for the growth of P. aeruginosa and four mutator strains in sub-MIC concentration of Ciprofloxacin
Publication: Research - peer-review › Poster – Annual report year: 2008

Maximum Likelihood based comparison of the specific growth rates for P. aeruginosa and four mutator strains
Publication: Research - peer-review › Journal article – Annual report year: 2008

Simulation Study for Transfer of Antibiotic Resistance via Mutator Subpopulation
Publication: Research › Poster – Annual report year: 2008

Using random walk in models specified by stochastic differential equations to determine the best expression for the bacterial growth rate
Publication: Research › Sound/Visual production (digital) – Annual report year: 2008

Stochastic differential equations used to model conjugation
Publication: Research › Conference abstract for conference – Annual report year: 2007

Projects:

Nonlinear Stochastic Modelling of Antimicrobial resistance in Bacterial Populations
Project: PhD