Curriculum Vitae

**Alison P. Galvani**

Director, Yale Center for Infectious Disease Modeling and Analysis (CIDMA)

Burnett and Stender Families Professor of Epidemiology

Yale University School of Public Health

**Education**

2002 D. Phil University of Oxford. Advisor: Lord Robert May

1998 First class BA (Honors, with Distinction) in Biological Sciences from University of Oxford

**Positions**

2015-present Burnett and Stender Families Professor of Epidemiology

2014-present Director, Yale Center for Infectious Disease Modeling and Analysis (CIDMA)

2013-present Professor of Epidemiology, Yale School of Public Health

2013-present Professor, Dept. of Ecology and Evolutionary Biology, Yale University

2009-2013 Associate Professor (with tenure), Yale School of Public Health

2009-2013 Associate Professor, Dept. of Ecology and Evolutionary Biology, Yale University

2004-2009 Assistant Professor, Yale School of Public Health

2008-2009 Assistant Professor, Dept. of Ecology and Evolutionary Biology, Yale University

2002-2004 Miller Research Fellow, University of California, Berkeley

**Honorary Positions**

2015-present Professor of Epidemiology, University of Liberia

2015-present Professor of Infectious Diseases, KIIT School of Public Health, India

2017- Governing Council of the Connecticut Academy of Science and Engineering

## Awards/Honors

2016 Certificate of Appreciation from Liberian Ministry of Health for “Pivotal role in the eradication of the Ebola virus from Liberia”

2013 Bellman Prize

2012 The Blavatnik Award for Young Scientists from the New York Academy of Sciences

2007 Fellowship from Institute for Advanced Studies, Berlin

2007 MacMillan Award

2006 John Simon Guggenheim Memorial Foundation Award

**Publications**

212. Thomson, N., Littlejohn, T., Morrison, S.J., Strathdee, S.A., Southby, R.F., Coghlan, B., Rosenfeld, J.V. & **Galvani, A.P.** (2018) Harnessing synergies at the interface of public health and the security sector. *The Lancet*. In press

211. Wells, C.R., Pandey, A., Parpia, A.S., Fitzpatrick, M.C., Meyers, L.A., Singer, B.H. & **Galvani, A.P.** (2019) Ebola vaccination in the Democratic Republic of the Congo. *PNAS*. In press

210. Goedel, W.C., King, R.F., Lurie, M.N., Galea, S., Townsend, J.P., **Galvani, A.P.**, Friedman, S.R., Marshall, B.D.L. (2019) Implementation of syringe services programs to prevent rapid HIV transmission in rural counties in the United States. *Clinical Infectious Diseases*. In press

209. Capewell, P., Atkins, K., Weir, W., Jamonneau, V., Camara, M., Clucas, C., Swar, N.K., Ngoyi, D.M., Rotureau, B., Garside, P., **Galvani, A.P.**, Bucheton, B., MacLeod, A. (2018) Resolving the apparent transmission paradox of African sleeping sickness. *PLoS Biology*. In press.

208. **Galvani, A.P.**, Durham, D.P., Vermund, S.H., Fitzpatrick, M.C. (2017) California Universal Health Care: An economic stimulus and life-saving proposal. *The Lancet*. 390(10106): 2012-2014.

207. Sah, P., Fitzpatrick, M.C., Pandey, A. & **Galvani, A.P.** (2017) HIV criminalization exacerbates subpar diagnosis and treatment across the US. *AIDS*. 31(17): 2437-2439.

206. Fitzpatrick, M.C., Singer B.H., Hotez P.J., **Galvani A.P.** (2017) Saving lives efficiently across sectors: the need for a Congressional cost-effectiveness committee. *The Lancet*. 6736(17): 17-19.

205. **Galvani, A.P.**, Fitzpatrick, M.C., Vermund, S.H. & Singer, B.H. (2017)Fund global health: Save lives and money. *Science.* 356: 1018-1019.

204. Fitzpatrick, M.C., Gray, G.E. & **Galvani, A.P.** (2018) The challenge of vanquishing HIV for the next generation. *JAMA Pediatrics*. 172: 609-610

203. Sah, P., Medlock, J., Fitzpatrick, M.C., Singer, B.H. & **Galvani, A.P.** (2018) Optimizing the impact of low-efficacy influenza vaccines. *Proceedings of the National Academy of Sciences*. 115: 5151-5156

202. Fallah, M.P., Skrip, L.A., Raftery, P., Kullie, M., Borbor, W., Laney, S., Blackley, D.J., Christie, A., Dokubo, E.K. Dokubo, Lo, T.Q., Coulter, S., Baller, A., Vonhm, B.T., Bemah, P., Lomax, S., Yeiah, A., Wapoe-Sackie, Y., Mann, J., Clement, P., Davies-Wayne, Hamblion, E., Wolfe, C., Williams, D., Gasaira, A., Kateh, F., Nyenswah, T. & **Galvani, A.P.** (2017)Bolstering community cooperation in Ebola resurgence protocols: combining field blood draw and point-of-care diagnosis. *PLoS Medicine.* 14(1): e1002227.

201. **Galvani, A.P.**, Pandey, A., Fitzpatrick, M.C., Medlock, J. & Gray, G.E. (2018) Defining control of the HIV pandemic. *Lancet HIV*. In press

200. Bartsch, S.M., Asti, L.A., Cox, S., Durham, D.P., Randall, S., Hotez, P.J., **Galvani, A.P.** & Lee, B.Y. (2018) What is the value of different Zika vaccination strategies to prevent and mitigate Zika outbreaks. *The Journal of Infectious Diseases*. In press

199. Marshall, B.D.L., Goedel, W.G., King, M.R., Singleton, A., Durham, D.P., Chan, P.A., Townsend, J.P., **Galvani, A.P.** (2018) Potential effectiveness of long-acting injectable pre-exposure prophylaxis for HIV prevention in men who have sex with men: A modeling study. *Lancet HIV*. 5:e498-e505

198. Durham, D.P., Fitzpatrick, M.C., Ndeffo-Mah, M.L., Parpia, M.S., Michael, N.L., **Galvani, A.P.** (2018) Evaluating Zika vaccination strategies in the Americas. *Annals of Internal Medicine*. 168:621-630

197. Lee, B.Y., Bartsch, S.M., Skrip, L., Hertenstein, D.L., Avelis, C.M., Ndeffo-Mbah, M., Tilchin, C., Dumonteli, E.O. & **Galvani, A.P.** (2018)Are the London Declaration’s 2020 Goals sufficient to control Chagas disease: Modeling scenarios for the Yucatan Peninsula *PLoS NTDs.*12:e0006337

196. Bartsch, S.M., Avelis, C.M., Hertenstein, D.L., Ndeffo-Mbah, M., Tilchin, C., Dumonteli, E.O. & **Galvani, A.P.** & Lee, B.Y. (2018)The economic value of identifying and treating Chagas disease patients earlier and the impact on *Trypanosoma cruzi* transmission *PLoS NTDs.* In press.

195. Medlock, J., Pandey, A., Parpia, A.S., Tang, A., Skrip, L.A. & **Galvani, A.P.** (2017)Effectiveness of UNAIDS targets and HIV vaccination across 127 countries. *Proceedings of the National Academy of Sciences, USA.* 114: 4017-4022.

194. King, C.A. & **Galvani, A.P.** (2018)Global Burden of Schistosomiasis. *The Lancet.* 391-307-308

193. Medley, G.F., Blok, D.J., Crump, R.E., Hollingsworth, T.D., **Galvani, A.P.**, Ndeffo-Mbah, M.L., Porco, T.C., Richardus, J.H. (2018) Policy Lessons from Quantitative Modeling of Leprosy. *Clinical Infectious Diseases*. 66:S281-S285

192. Grantz, K.H., Chabaari, W., Samuel, R.K., Gershom, B., Blum, L., Worden, L., Ackley, S., Liu, F., Lietman, T.M., Galvani, A.P., Prajna, L., M.L., Porco. (2018) Spatial distribution of leprosy in India: an ecological study. *Infectious Diseases of Poverty*

191. Rock, K.S., Ndeffo-Mbah, M.L., Castano, S., Palmer, C., Pandey, A., Atkins, K.E., Ndung’u, J.M., Hollingsworth, T.D., **Galvani, A.P.**, Bever, C., Chitnis, N., Keeling, M.J. (2018) Assessing strategies against gambiense sleeping sickness through mathematical modeling. *Clinical Infectious Diseases*. 66:S286-S292

190. Crystal, C., Skrip, L.A., Nyenswah, T., Flumo, H., **Galvani, A.P.**, Durham, D.P., Fallah, M.P. (In press) Translating models of support for women with chronic viral infections to address the reproductive health needs of West African Ebola survivors. Book chapter in “Pregnant in the Time of Ebola. Women and Their Children in the 2013-2015 West African Epidemic” *Springer Publishers*

189. Ndeffo-Mbah, M.L., Vigliotti, V.S., Skrip, L.A., Dolan, K. & **Galvani, A.P.** (2018) Dynamic models of infectious disease transmission in prisons and the general population. *Epidemiologic Reviews*, 40: 40-57

188. Skrip, L.A., Fallah, M.P., Gaffney, S.G., Yaari, R., Yamin, D., Huppert, A., Bawo, L., Nyenswah, T. & **Galvani, A.P.** (2017)Characterizing risk of Ebola transmission based on frequency and type of case-contact exposures. *Philosophical Transactions of the Royal Society.* 372(1721).

187. Alsallaq, R.A., Gurarie, D., Ndeffo-Mbah, M.L., **Galvani, A.P.**, King, C. (2017) Quantitative Assessment of the Impact of Partially Protective Anti-Schistosomiasis Vaccines. *PLoS NTD.* 11(4): e0005544.

186. Lee, B.Y., Alfaro-Murillo, J., Parpia, A.S., Asti, L., Wedlock, P.T., Hotez, P.J. & **Galvani, A.P.,** Dobson, A.P., (2017) The potential economic burden of Zika in the continental United Sates. *PLoS NTD.* 11: e0005531

185. Castro, L.A., Fox, S.J., Chen, X., Liu, K., Bellan S.E., Dimitrov, N.B., **Galvani, A.P.**, Meyers, L.A. (2017) Assessing real-time Zika risk in the United States. *BMC Infect Dis.* 17: 284

184. Bartsch, S.M., Peterson, J.K., Hertenstein, D.L., Skrip, L.A., Ndeffo-Mbah, M.L., **Galvani, A.P.,** Dobson, A.P., Lee, B.Y. (2017) Comparison and validation of two compartmental models of Chagas disease: A thirty years’ perspective from Venezuela. *Epidemics.* 18: 81-91.

183. Block, D.J., Crump, R.E., Sundaresh, R., Ndeffo-Mbah, M.L., **Galvani, A.P.**, Porco, T.C., de Vlas, S.J., Mdeley, G.F., Richardus, J.H. (2017) Forecasting the new case detection rate of leprosy in four states of Brazil: A comparison of modeling approaches. *Epidemics.* 18: 92-100.

182. Block, A.R., Ross, J.V., Greenhalgh, S., Durham, D.P., **Galvani, A.P.**, Parikh, S., Esterman, A. (2017) Modelling the impact of antimalarial quality on the transmission of sulfadoxine-pyrimethamine resistance in *Plasmodium falciparum*. *Infectious Disease Modelling.* 2: 161-187

181. Rock, K.S., Pandey, A., Ndeffo-Mbah, M.L., Atkins, K.E., Lumbala, C., **Galvani. A.P.,** & Keeling. M.J. (2017) Data-Driven Models to Predict the Elimination of Sleeping Sickness in Former Equateur Province of DRC. *Epidemics.* 18: 101-12.

180. **Galvani, A.P.**, Bauch, C.T., Anand, M., Singer, B.H., Levin, S.A. (2016)Human-environment interactions in population and ecosystem health. *Proceedings of the National Academy of Sciences.* 113: 14502-14506.

179. Durham, D.P., Ndeffo-Mbah, M.L., Skrip, L.A., Jones, F.K., Bauch, C.T., **Galvani, A.P.** (2016)The national and state level impact and cost-effectiveness of nonavalent HPV vaccination in the US. *Proceedings of the National Academy of Sciences*. 113: 5107-5112.

178. Macarayan, E., Ndeffo-Mbah, M., Beyrer, C. & **Galvani, A.P.** (2016)The drug war and impending public health crisis in the Philippines. *The Lancet.* 388: 2870.

177. Yamin, D., Jones, F.K., DeVincenzo, J.P., Gertler, J.P., Kobiler, O., Townsend, J.P., **Galvani, A.P.** (2016)Vaccination strategies against RSV. *Proceedings of the National Academy of Sciences.* 113: 13239-13244.

176. Dolan, K., Wirtz, A.L., Moazen, B., **Galvani, A.P.**, Ndeffo-Mbah, M., Kinner, S., Courtney, R., McKee, M., Amon, J.J., Maher, L., Hellard, M., Beyrer, C., Altice, F. (2016)Global burden of HIV, viral hepatitis and tuberculosis among prisoners and detainees. *The Lancet.* 388: 1089-1102.

175. Fitzpatrick, M.C., Shah, H.A., Pandey, A., Bilinski, A.M., Kakkar, M., Clark, A.D., Townsend, J.P., Abbas, S., **Galvani, A.P.** (2016)One Health approach to cost-effective rabies control in India. *Proceedings of the National Academy of Sciences*. 113: 14574-14581.

174. Pandey, A. & **Galvani, A.P.** (2016)Strategies for *Trypanosoma brucei gambienese* elimination. *Lancet Global Health.* 5: e10-e11.

173. Ndeffo-Mbah, M.L & **Galvani, A.P.** (2016)Global elimination of Lymphatic filariasis. *Lancet ID.* 17: 358-359.

172. Eggo, R.M., Scott, J.G., **Galvani, A.P.**, Meyers, L.A. (2016)Respiratory virus transmission dynamics determines timing of asthma exacerbation peaks: evidence from a population-level model. *Proceedings of the National Academy of Sciences* 113.8 (2016): 2194-199.

171. Schluter, D.K., Ndeffo-Mbah, M.L., Takougang, I., Ukety, T., Wandji, S. & **Galvani, A.P.**, Diggle, P.J. (2016)Using community-level prevalence of Loa loa infection to predict the proportion of highly-infected individuals: statistical modeling to support lymphatic filariasis and onchocerciasis elimination programs. *PLoS NTD.* 10: e0005157.

170. Fallah, M.P., Skrip, L.A., Dahn, B.T., Nyenswah, T.G., Flumo, H., Glayweon, M., Lorseh, T.L., Kaler, S.G., Higgs, E.S. & **Galvani A.P.** (2016)Pregnancy outcomes in Liberian women who conceived after recovery from Ebola virus disease. *Lancet Global Health.* 4: e678-e679.

169. Ndeffo-Mbah M.L., Parpia, A.S. & **Galvani, A.P.** (2016)Mitigating prenatal Zika infections in the Americas. *Annals of Internal Medicine,* doi:10.7326/M16-0919.

168. Bilinski, A.M., Fitzpatrick, M.C., Rupprecht, C.E., Paltiel, D. & **Galvani, A.P**. (2016) Optimal frequency of rabies vaccination campaigns in sub-Saharan Africa. *Proceedings of the Royal Society*. 283: 20161211.

167. Alfaro-Murillo, J.A., Parpia, A.S., Fitzpatrick, M.C., Tamagnan, J.A., Medlock, J., Ndeffo-Mbah M.L., Fish, D., Avila-Aguero, M.L., Marin, R., Ko, A.I. & **Galvani, A.P.** (2016)A cost-effectiveness tool for informing policies on Zika virus control. *PLoS NTDs.* 10: e0004743.

166. Yamin, D., Atkins, K., Remy, V. & **Galvani A.P.** (2016)Cost-effectiveness of rotavirus vaccination in France – Accounting for indirect protection. *Value in Health.* 19: 811-819.

165. Skrip, L.A. & **Galvani A.P.** (2016)Next steps for Ebola vaccination: Deployment in non-epidemic, high-risk settings. *PLoS NTDs.* 10: e0004802.

164. Durham, D.P., Skrip L.A., Bruce, R.D., Vilarinho, S., Elbasha, E.H., **Galvani A.P.** &

Townsend, J.P. (2016)The Impact of Enhanced Screening and Treatment on Hepatitis C

in the US. *Clinical Infectious Diseases* 62.3 (2015): 298-304.

163. Herrera J.L., Srinivasan, R., Brownstein, J.S., **Galvani A.P.** & L.A. Meyers (2016)Disease Surveillance on complex social networks. *PLoS Computational Biology.* 12: e1004928.

162. Meng L., Taylor, E., Atkins K.E., Chapman, G.B. & **Galvani A.P.** (2016)Stimulating Influenza Vaccination via Prosocial Motives. *PLoS One.* 11, e0159780.

161. Ndeffo-Mbah M.L., Durham, D.P., Skrip L.A., Nsoesie, E.O., Brownstein, J.S., Fish, D. & **Galvani A.P.** (2016)Evaluating the effectiveness of localized control strategies to curtail chikungunya. *Scientific Reports.* 6: 23887.

160. Fitzpatrick, M.C., Wenzel, N.S., Scarpino, S.V., Althouse, B.M., Atkins, K.E., **Galvani A.P.** & Townsend, J.P. (2016)Cost-effectiveness of next-generation vaccines: the case of pertussis. *Vaccine.* 34: 3405-3411.

159. Gilbert, J.A., Shenoi, S.V., Moll, A.P., Friedland, G.H., Paltiel, A.D., **Galvani, A.P.** (2016) Cost-effectiveness of community-based TB/HIV screening and linkage to care in rural South Africa. *PLoS ONE.* 11: e0165614.

158. Gilbert, J.A., Medlock, J., Aksoy, S., Ndeffo-Mbah M.L. & **Galvani A.P.** (2016)Determinants of Human African Trypanosomiasis Elimination via Paratransgenesis. *PLoS NTDs*. 10(3): e0004465.

157. Parpia, A.S., Ndeffo-Mbah M.L., Wenzel, N.S., & **Galvani A.P.** (2015)The impact of the 2014-2015 Ebola outbreak on malaria, HIV and tuberculosis. *Emerging Infectious Diseases* 22.3: 433-441.

156. Fallah, M.P., Skrip L.A., Gertler, S., & **Galvani A.P.** (2015)Quantifying poverty as a driver of Ebola transmission. *PLoS NTDs.* 162: 11-17.

155. Townsend, J.P., Skrip L.A., & **Galvani A.P.** (2015)Impact of bed capacity on

spatiotemporal shifts in Ebola transmission. *Proceedings of the National Academy of*

*Sciences, USA* 112.46: 14125-4126.

154. Alfaro-Murillo, J.A., Townsend, J.P. & **Galvani A.P.** (2016) Optimizing age of cytomegalovirus screening and vaccination to avert congenital disease in the US. *Vaccine.* 34: 225-229.

153. Durham, D.P., Olsen M.A., Dubberke, E.R., **Galvani A.P.** & Townsend, J.P. (2015)Quantifying transmission of *Clostridium difficile* in and out of health care settings. *Emerging Infectious Diseases.* 22: 608-616.

152. DeAngelis, H., Scarpino, S.V., Fiztpatrick, M.C., **Galvani A.P.** & Althouse, B.A. (2016)Epidemiological and economic impacts of priming with whole-cell *Bordetella pertussis* vaccine. *JAMA Pediatrics.* 2016.0047.

151. Fallah M., Dahn, B., Nyenswah, T.G., Massaquoi, M., Skrip L.A., Ndeffo-Mbah, M., Joe, N., Freeman, S., Harris, T., Benson, Z. & **Galvani A.P.** (2015)Interrupting Ebola transmission in Liberia through community-based initiatives. *Annals of Internal Medicine*. 2016; 164: 367-369.

150. Atkins, K.E., Fitzpatrick, M.C., **Galvani A.P.** & Townsend, J.P. (2015)Cost-effectiveness of pertussis vaccination during pregnancy in the US. *American Journal of Epidemiology.* 183: 1159-1170.

149. Fallah, M., Skrip, L.A., d’Harcourt, E. & **Galvani, A.P**. (2015) Strategies to prevent future Ebola epidemics. *The Lancet.* 386: 131.

148. Bellan, S.E., Dushoff, J., **Galvani, A.P**. & Meyers, L.A. (2015) Re-assessment of HIV-1 acute phase infectivity: accounting for heterogeneity and study design with simulated cohorts. *PLoS Medicine*. 17;12:e1001801.

147. Wells, C., Yamin, D., Ndeffo-Mbah, M.L., Wenzel, N.S., Gaffney, S.G., Townsend, J.P., Meyers, L.A., Fallah, M., Nyenswah, T.G., Altice, F., Atkins, K.E. & **Galvani, A.P**. (2015) Harnessing case isolation and ring vaccination to control Ebola. *PLoS NTDs.* 9: e0003794.

146. Atkins, K., Abhishek, P., Wenzel, N., Skrip, L., Yamin, D., Nyenswah, T., Fallah, M., Bawo, L., Medlock, J., Altice, F., Townsend, J., Ndeffo-Mbah, M.L. & **Galvani, A.P.** (2015) Retrospective analysis of the 2014-15 Ebola epidemic in Liberia. *American Journal of Tropical Medicine and Hygiene* 94.4 (2016): 833-39.

145. Yoko, I., Ohkusa, Y., Sugawara, T., Chapman, G.B., Yamin, D., Atkins, K.E. , Taniguchi, K., Okabe, N. & **Galvani, A.P**. (2015) Social contacts, vaccination decisions and influenza in Japan. *Journal of Epidemiology and Community Health* 70.2 (2015): 162-67.

144. Taylor, E., Atkins, K.E., Medlock, J., Li, M., Chapman, G.B. & **Galvani, A.P**. (2015) Cross-cultural household influence on vaccination decisions. *Medical Decision Making* (2015): 0272989X15591007.

143. Bellan, S.E. Pulliam, J, Pearson, C., Champredon, D., Fox, S., Skrip, L**, Galvani**, **A.P.,** Gambhir, M., Lopman, B., Porco, T., Meyers, L.A., Dushoff, J. (2015) The statistical power and validity of Ebola vaccine trials in Sierra Leone: A simulation study of trial design and analysis. *Lancet ID.* 15:703-10.

142. Yamin, D., Gertler, S., Ndeffo-Mbah, M. & **Galvani, A.P**. (2015) Impact of Ebola disease progression and case fatality on transmission and control in Liberia. *Annals of Internal Medicine.* 6;162:11-7.

141. Atkins, K.E., Wenzel, N.S., Ndeffo-Mbah, M., Altice, F.L., Townsend, J.P., **Galvani, A.P**. (2015) Under-reporting and case fatality estimates for emerging epidemics. *British Medical Journal.* 16;350:h1115.

140. Greenhalgh, S., Ndeffo-Mbah, M., **Galvani, A.P**., Parikh, S. (2015) The epidemiological impact of HIV antiretroviral therapy on malaria in children. *AIDS* 29(4): 473-82.

139. Nsoesie, E.O, Ricketts, R.P., Brown, H.E., Fish, D., Durham, D.P., Ndeffo-Mbah, M.L., Ahmed, S., Marcellin, C., Shelly, E., Owers, L., Wenzel, N., **Galvani, A.P**. & Brownstein, J.S. (2015) Spatial and temporal clustering of Chikungunya Virus Transmission in Dominica. *PLoS NTD* 9.8 (2015): e0003977.

138. Funk, S., Bansal, S., Bauch, CT., Eames, K.T.D., Edmunds, W.J., **Galvani, A.P**. & Klepac, P. (2015), Nine challenges in incorporating the dynamics of behaviour in infectious disease models. *Epidemics.* 10: 21-5.

137. Scarpino V. S, Iamarino A., Wells C., Yamin D. Ndeffo-Mbah, Wenzel S. N., Fox J. S., Nyenswah T., Altice F.L., **Galvani A. P**., Meyers A. L., Townsend P. J. (2015)

Epidemiological and viral genomic sequence analysis of the 2014 Ebola outbreak reveals clustered transmission, *Clinical Infectious Diseases*. ciu1131I.

136. Singh, B., Huang, H., Morton, D., **Galvani, A.P**., Clements, B., Meyers, L.A. (2015) Optimizing Distributions of Pandemic Influenza Antivirals. *Emerging Infectious Diseases.* 21: 251-8.

135. Ndeffo-Mbah, M.L., Parikh, S., **Galvani, A.P.** (2015) Comparing the impact of artemisinin-based combination therapies on malaria transmission in sub-Saharan Africa. *American Journal of Tropical Medicine and Hygiene.* 92:555-60.

134. Gutfraind, A., **Galvani, A.P**. & Meyers, L.A. (2015) Efficacy and Optimization of Palivizumab Injection Regimes against RSV. *JAMA Paediatrics*. 169:341-8.

133. Yamin D.**,** Gertler S., Ndeffo-Mbah M. L., Skrip, L.A., Fallah, M., Nyenswah T.G., Altice, F.L., **Galvani, A. P.** (2015) Ebola transmission and control efforts for elimination in Liberia. *Annals of Internal Medicine*. 162:11-7.

132. Greenhalgh, S., **Galvani, A. P.** & Medlock, J.(2015) Disease elimination and re-emergence in differential-equation models. *Journal of Theoretical Biology* 387 (2015): 174-180.

131. Gurarie, D., Yoon, N., Li, E., Ndeffo-Mbah, M., Durham, D., Phillips, A.E., Aurelio, O., Ferro, J., **Galvani, A. P.**, & King, C.H.(2015) Modelling control of Schistosoma haematobium infection: predictions of the long-term impact of mass drug administration in Africa. *Parasites & Vectors* 8.1 (2015): 1-14.

130. Brook, C., Beauclair, R., Ngwenya, O., Worden, L., Ndeffo-Mbah, M., Lietman, T., Satpathy, S., **Galvani, A. P.**, & Porco, T.(2015) Spatial heterogeneity in projected leprosy trends in India. *Parasites & Vectors* 8.1 (2015): 1-11.

129. Pandey, A., Atkins, K., Bucheton, B., Aksoy, S. **Galvani, A. P.** & Ndeffo-Mbah, M.(2015) Evaluating long-term effectiveness of sleeping sickness control measures in Guinea. *Parasites & Vectors* 8.1 (2015): 1-10.

128. Gilbert, J.A., Long, E.F., Brooks, R.P., Friedland, G.H., Moll, A.P., Townsend, J.P., Galvani, A.P. & Shenoi, S.V.(2015) Integrating community-based interventions to reverse the convergent TB/HIV epidemics in rural South Africa. *PLoS ONE*. 10:e0126267.

127. Pandey, A., Atkins, K.E., Medlock, J., Wenzel, N., Townsend, J.P., Childs, J.E., Nyenswah, T.G., Ndeffo-Mbah, M., **Galvani, A.P**. (2014) Strategies for Containing Ebola in West Africa. *Science* 346(6212):991-5.

126. Lewnard, J.A., Ndeffo-Mbah, M., Alfaro-Murillo, J.A., Altice, F.L., Townsend, J.P., **Galvani, A.P**. (2014) Dynamics and control of Ebola virus transmission in Montserrado, Liberia: a mathematical modeling analysis. *Lancet ID* (12):1189-95.

125. **Galvani, A.P**. Ndeffo-Mbah, M.L., Wenzel, N. & Childs, J.E. (2014) Ebola Vaccination: If Not Now, When? *Annals of Internal Medicine* 161:749-50.

124. Lipsitch, M. & **Galvani, A.P**. (2014) Ethical Alternatives to Experiments with Novel Potential Pandemic Pathogens. *PLoS Medicine* 11:e1001646.

123. Fitzpatrick, M.C., Hampson, K., Cleaveland, S., Mzimbiri, I., Lankester, F., Lembo, T., Meyers, L.A., Paltiel, D. & **Galvani, A.P**. (2014) Cost-effectiveness of canine vaccination to prevent human rabies in rural Tanzania. *Annals of Internal Medicine*, 160:91-100.

122. Ndeffo-Mbah, M.L., Skrip, L.A., Greenhalgh, S., Hotez, P. **Galvani, A.P.** (2014) Impact of *Schistosoma mansoni* on malaria transmission in sub-Saharan Africa. *PLoS NTDs.* 8:e3234.

121. Yamin, D., Balicer, R.D., **Galvani, A.P**. (2014) Cost-effectiveness of influenza vaccination in prior pneumonia patients in Israel. *Vaccine* 32:4198-205.

120. Yamin, D., Gavious, A., Solnik, E., Davidovtich, N., Balicer, R.D., **Galvani, A.P**. & Pliskin, J.S. (2014) An innovative influenza vaccination policy: Targeting last season’s patients. *PLoS Computational Biology* 10:e1003643.

119. Ndeffo Mbah, M.L., Gilbert, J.A. & **Galvani, A.P**. (2014) Evaluating the potential impact of mass praziquantel administration for HIV prevention in *Schistosoma haematobium* high-risk communities. *Epidemics.* 22-7.

118. Bauch, C.T. & **Galvani, A.P**. (2013) Social Factors of Epidemiology. *Science.* 342: 47-49.

117. Ndeffo Mbah, M.L., Kjetland, E. F., Atkins, K.E., Poolman, E.M., Orenstein, E.W., Meyers, L.A., Townsend, J.P. & **Galvani, A.P**. (2013) Cost-effectiveness of a community-based intervention for reducing the transmission of *Schistosoma haematobium* and HIV in Africa. *Proceedings of the National Academy of Sciences, USA.* 110:7952-7957.

116. Talbert-Slagle, K., Atkins, K.E., Yan, K., Khurana, E., Gerstein, M., Bradley, E.H., Berg, D., **Galvani, A.P.** & Townsend, J.P. (2013) Cellular Superspreaders: an epidemiological perspective on HIV infection inside the body. *PLoS Pathogens* 10:e1004092.

115. Medlock, J., Atkins, K.E., Thomas, D.N., Aksoy, S. & **Galvani, A.P**. (2013) Evaluating paratransgenesis as a potential control strategy for African trypanosomiasis. *PLoS NTDs.* 7:e2374.

114. Braithwaite, S.R., Nucifora, K.E., Kessler, J., Toohey, C., Lingfeng, L., Mentor, S.M., Uhler, L.M., Roberts, M.S., **Galvani, A.P**. & Bryant, K. (2014) How inexpensive does an alcohol intervention in Kenya need to be in order to deliver favourable value by reducing HIV-related morbidity and mortality? *JAIDS* 66:e54-8.

113. Gilbert, J.A., Meyers, L.A., Galvani, A.P. & Townsend, J.P. (2014) Probabilistic uncertainty analysis of epidemiological modelling to guide public health intervention policy. *Epidemics,* 6:37-45.

112. Boni, M.J., **Galvani, A.P**., Wickelgren, A.L. & Malani, A. (2013) Economic Epidemiology of Avian Influenza on Smallholder Poultry Farms. *Theoretical Population Biology,* 90:135-44.

111. Ndeffo Mbah, M.L., Durham, D.P, Medlock, J. & **Galvani, A.P**. (2014) Country- and age-specific optimal allocation of dengue vaccines. *Journal of Theoretical Biology*, 342:15-22.

110. Skene, K.J., Paltiel, A.D., Shim, E. & **Galvani, A.P**. (2013) A marginal benefit approach for vaccinating influenza “superspreaders”. *Medical Decision Making* 34:536-49.

109. Ibuka, Y., Li, M., Vietri, J.T., Chapman, G.B. & **Galvani, A.P**. (2014) Free-riding behavior in vaccination decisions: an experimental study. *PLoS ONE,* 9:e87164. doi: 10.1371/journal.pone.0087164.

108. Ndeffo Mbah, E. F., Atkins, K.E., Poolman, E.M., Orenstein, E.W., Meyers, L.A., Townsend, J.P. & **Galvani, A.P**. (2013) Potential cost-effectiveness of schistosomiasis treatment for reducing HIV transmission in Africa. *PLoS Neg Dis* 7:e2346.

107. Aksoy, S., Caccone, A., **Galvani, A.P.** & Okedi, L.M. (2013) *Glossina fuscipes* populations provide insights for Human African Trypanosomiasis transmission in Uganda. *Trends in Parasitology* 29:394-406.

106. Ndeffo Mbah, M.L., Poolman, E.M., Drain, P.K., Coffee, M.P., van der Werf, M.J. **Galvani, A.P.** (2013) HIV and *Schistosoma haematobium* prevalence correlate in sub-Saharan Africa. *Tropical Medicine & International Health.* (10):1174-9.

105. Durham, D.P., Ndeffo Mbah, M.L., Medlock, J., Luz, P.M., Meyers, L.A., Paltiel, A.D. & **Galvani, A.P**. (2013) Dengue dynamics and vaccine cost-effectiveness in Brazil. *Vaccine* 31:3957-3961.

104. Atkins, K.E., Medlock, J., Townsend, J.P. & **Galvani, A.P**. (2013) Epidemiological mechanisms of genetic resistance to kuru. *Journal of the Royal Society Interface* 10(85):20130331.

103. Ndeffo Mbah, M.L., Medlock, J., Meyers, L.A., **Galvani, A.P.**, & Townsend, J.P. (2013) Optimal targeting of seasonal influenza vaccination toward younger ages is robust to parameter uncertainty. *Vaccine.* 31:3079-3089.

102. Durham, D.P., Poolman, E.M., Ibuka, Y., Townsend, J.P. & **Galvani, A.P**. (2012) Reevaluation of epidemiological data demonstrates that it is consistent with cross-immunity among HPV types. *Journal of Infectious Diseases.* 206:1291-1298.

101. Shim, E. & **Galvani, A.P**. (2012) Distinguishing vaccine efficacy and effectiveness. *Vaccine.* 30:6700-6705.

100. Fitzpatrick, M.C., Hampson, K., Cleaveland, S., Meyers, L.A., Townsend J.P. & **Galvani, A.P**. (2012) Potential for rabies control through dog vaccination in Tanzania. *PLoS NTDs.* 6:e1796.

99. Tekle, Y., Nielsen, K., Liu, J., Pettigrew, M., Meyers, L.A., **Galvani, A.P**. Townsend J.P. (2012) Controlling antimicrobial resistance through targeted vaccine-induced replacement of strains. *PLoS ONE.* 7:e50688. doi: 10.1371/journal.pone.0050688.

98. Karan, A., Chapman, G.B. & **Galvani, A.P**. (2013) The influence of poverty and culture on the transmission of parasitic infections in rural Nicaraguan villages. *Journal of Parasitology Research.* 2012:478292.

97. Porco, T.C., Gao, D., Scott, J.C., Shim, E., Enanoria, W.T., **Galvani, A.P**. & Lietman, T.M. (2012) When does overuse of antibiotics become a tragedy of the commons? *PLoS ONE.* 7:e46505.

96. Pitzer, V.E., Atkins, K.E., Freiesleben de Blasio, B., Van Effelterre, T., Atchison C.J., Harris, J.P., Shim, E., **Galvani, A.P**., Edmunds, W.J., Viboud, C., Patel, M.M., Grenfell, B.T., Parashar, U. & Lopman, B.A. (2012) Direct and indirect effects of rotavirus vaccination: comparing predictions from transmission dynamic models. *PLoS ONE.* 7:e42320.

95. Padmanabha, H., D. Durham, E., Correa, F., Diuk-Wasser, M., & **Galvani, A.P**. (2012) The roles of Aedes aegypti super-production and human density in dengue transmission. *PLoS NTDs.* 6:e1799.

94. Atkins, K.,E. Shim, E., Carroll, S., Quilici, S., & **Galvani, A.P**. (2012) The cost-effectiveness of pentavalent rotavirus vaccination in England and Wales. *Vaccine.* 30:6766-6776.

93. Chapman, G.B., Li, M., Vietri, J., Ibuka, Y., Thomas D., Yoon, H. & **Galvani, A.P**. (2012) Using game theory to examine incentives in influenza vaccination behavior. *Psychological Science.* 23:1008-1015.

92. Ndeffo Mbah, M.L., Jingzhou, L., Bauch, C.T., Tekel, Y., Medlock, J., Meyers, L.A. & **Galvani, A.P**. (2012) The impact of imitation on vaccination behaviour in social contact networks. *PLoS Computational Biology* 8:e1002469.

91. Shim, E., Chapman, G.B., Townsend, J.P. & **Galvani, A.P.** (2012) The influence of altruism on influenza vaccination decisions. *Journal of Royal Society Interface* 9:2234-2243.

90. Hladish, T.J., Melamud, E., Barrera, L.A., **Galvani, A.P.** & Meyers, L.A. (2012) EpiFire: An open source C++ library and application for contact network epidemiology. *BMC Bioinformatics.* 13:76.

89. Araz, O., Damien, P., Paltiel, D., Burke, S., Gejin, B., **Galvani, A.P.** & Meyers, L.A. (2012) Simulating school closure policies for cost-effective pandemic decision making. *BMC Public Health.* 12:449.

88. Araz, O., **Galvani, A.P.** & Meyers, L.A. (2012) Geographic prioritization of distributing pandemic influenza vaccines. *Health Care Management Science.* 15:175-187.

87. Luz, P.M., Vanni, T., Medlock, J., Paltiel, A. D., **Galvani, A.P**. (2011) Dengue vector control strategies in an urban setting: an economic modeling assessment. *The Lancet.* 377:1673-1680.

86. Ibuka, Y., Paltiel, A. D., **Galvani, A.P**. (2012) Impact of program scale and indirect effects on the cost-effectiveness of vaccination programs. *Medical Decision Making.* 32:442-446.

85. Atkins, K.E., Shim, E., T., Pitzer, V.E. and **Galvani, A.P**. (2011) The impact of rotavirus vaccination on epidemiological dynamics in England and Wales. *Vaccine.* 30:552-564.

84. Tully, S.P., Anonychuk, A.M., T., Sanchez, D.M., **Galvani, A.P**. and Bauch, C.T. (2011) Time for change? An economic evaluation of integrated cervical screening and HPV immunization programs in Canada. *Vaccine.* 30:425-435.

83. Alam, U., Medlock, J., Brelsfoard, C., Pais, R., Lohs, C., Balmand, S., Carnogursky, J., Heddi, A., Takac, P., **Galvani, A.P**. and Aksoy, S. (2011) *Wolbachia* symbiont infections induce strong cytoplasmic incompatibility in the tsetse fly *Glossina morsitans*. *PLoS Pathogens.* 7:e1002415.

82. Tsao, K., Fish, D., **Galvani, A.P**. (2011) Predicted outcomes of vaccinating wildlife to reduce human risk of Lyme disease. *Vector-Borne and Zoonotic Diseases.* 12:544-551.

81. Vietri, J.T., Li, M., Chapman, G.B. & **Galvani, A.P.** (2011) Vaccinating to help ourselves and others. *Medical Decision Making.* 32:447-458.

80. Simpson, J.E., Hurtado, P.J., Medlock, J., Molaei, G., Andreadis, T.G., **Galvani, A.P**., Diuk-Wasser, M.A. (2012) Vector host-feeding preferences drive transmission of multi-host pathogens: West Nile Virus as a model system. *Proceedings of the Royal Society.* 279:925-933.

79. Wells, C.R., Tchuenche, J.M., Meyers, L.A., **Galvani, A.P**. & C.T. Bauch (2011) The impact of imitation processes on the effectiveness of ring vaccination. *Bulletin of Mathematical Biology.* 73: 2748-2772.

78. Liu, J., Kochin, B.F., Tekle, Y.I., **Galvani, A.P**. (2012) Epidemiological game theoretic dynamics of chickenpox vaccination in the US and Israel *J. R. Soc. Interface.* 9: 68-76.

77. Vietri, J.T., Chapman, G.B., Li, M. & **Galvani, A.P.** (2011) Preferences for HPV vaccination in parent-child dyads. *Preventative Medicine .*52:405-406.

76. Reluga, T.C., **Galvani, A.P**. (2011) A general approach for population games with application to vaccination. *Mathematical Biosciences.* 230:67-78*.*

75. Volz, E.M., Miller, J.C., **Galvani, A.P**. & Meyers, L.A. (2011) Effects of heterogeneous and clustered contact patterns on infectious disease dynamics. *PLoS Computational Biology.* 7:e1002042.

74. Li, M., Chapman, G.B., Ibuka, Y., Meyers, L.A. & **Galvani, A.P**. (2011) Who got vaccinated against H1N1 pandemic flu? – A longitudinal study. *Psychology and Health.* 27:101-115.

73. Cornforth, D.M., Reluga, T.C., Eunha,S., Bauch, C., **Galvani, A.P**. & Meyers, LA (2010) Erratic flu vaccination emerges from short-sighted behaviour in contact networks. *PLoS Computational Biology.* 7:e1001062.

72. Bauch, C. , Li, M, Chapman, G.B. & **Galvani, A.P**. (2010) Adherence to cervical screening in the era of human papillomavirus vaccination: how low is too low? *Lancet Infectious Diseases.* 10:133-137.

71. Li, M., Vietri, J., **Galvani, A.P**. & Chapman, G.B. (2010) How do people value life? *Psychological Science.* 21:163-167.

70. Luz, P.M., Struchiner, C.J. & **Galvani, A.P**. (2010) Modeling transmission dynamics and control of vector-borne neglected tropical diseases. *PLoS NTDs.* 4: e761*.*

69. Davis, S., Aksoy, S., & **Galvani, A.P.** (2010). A global sensitivity analysis for African sleeping sickness. *Parasitology.* 138:516-526.

68. Shim, E., Meyers, L.A., & **Galvani, A.P.** (2010). Optimal H1N1 vaccination strategies based on self-interest versus group interest. *BMC Public Health.* 11(Suppl 1):S4.

67. Ibuka, Y., Chapman, GB, Meyers, LA, Li, M & **Galvani, A.P.** (2010). The dynamics of risk perceptions and precautionary behavior in response to H1N1 pandemic influenza. *BMC Infectious Diseases.* 10:296.

66. Medlock, J. & **Galvani, A.P**. (2009) Protecting the herd from H1N1. *Science* 326: 934. (Comment)

65. Medlock, J., Meyers, L.A., & **Galvani, A.P.** (2009). Optimizing allocation for a delayed influenza vaccination campaign. *PLoS Currents Influenza*. December 11. RRN1134.

64. Medlock, J. & **Galvani, A.P**. (2009) Optimizing influenza vaccine distribution. *Science.* 325: 1705-1708.

63. Shim, E., Chapman, G.B. & **Galvani, A.P**. (2009) Decision making regarding antiviral intervention during an influenza pandemic. *Medical Decision Making.* 30: E64-81.

62. Shim, E., Hampson, K., Cleaveland, S. & **Galvani, A.P**. (2009) Evaluating the cost-effectiveness of rabies post-exposure prophylaxis: a case study in Tanzania. *Vaccine.* 27: 7167-7172.

61. Matser, A., Hartemink, N., Heesterbeek, H., **Galvani, A.P**. & Davis, S. (2009) Elasticity analysis in epidemiology: An application to tick-borne infections. *Ecology Letters.* 12: 1298-1305.

60. Basu, S., Friedland, G.H., Medlock, J., Andrews, J.R., Shah, N.S., Gandhi, N.R., Moll, A., Moodley, P., Strum, A.W. & **Galvani, A.P**. (2009) Averting epidemics of extensively drug-resistant tuberculosis. *Proceedings of the National Academy of Sciences, USA.* 106: 7672-7677.

59. Shim, E. & **Galvani, A.P**. (2009) Impact of transmission dynamics on the cost-effectiveness of rotavirus vaccination. *Vaccine.* 27: 4025-4030.

58. Medlock, J., Luz, P.M., Struchiner, C.J. & **Galvani, A.P**. (2009) The impact of transgenic mosquitoes on dengue virulence to humans and to mosquitoes. *American Naturalist* 174: 565-577.

57. Shim, E., Kochin, B. & **Galvani, A.P**. (2009) Insights from epidemiological game theory into gender-specific vaccination against rubella. *Mathematical Biosciences and Engineering* 6: 839-854*.*

56. Shim, E. & **Galvani, A.P**. (2009) Evolutionary repercussions of avian culling on host resistance and influenza virulence. *PLoS ONE* 4: e5503.

55. Orenstein, E.W., Basu, S., Shah, S.N., Andrews, J.R., Friedland, G.H., Moll, A.P., Gandhi, N.R. & **Galvani, A.P**. (2009) Treatment outcomes among patients with multidrug-resistant tuberculosis: systematic review and meta-analysis. *Lancet Infectious Diseases* 9: 153-161.

54. Basu, S., & **Galvani, A.P**. (2009) The evolution of tuberculosis virulence. *Bulletin of Mathematical Biology* 71:1073-1088.

53. Reluga, T.C., Medlock, J. & **Galvani, A.P**. (2009) The discounted reproductive number for epidemiology. *Mathematical Biosciences and Engineering* 6: 377-393.

52. Basu, S., Chapman, G.B. & **Galvani, A.P**. (2008) Integrating epidemiology, psychology and economics to achieve HPV vaccination targets. *Proceedings of the National Academy of Sciences, USA* 105: 19018-19023.

51. Basu, S., Orenstein, E. & **Galvani, A.P**. (2008) The impact of immune dynamics on drug-resistant tuberculosis epidemics. *Journal of Infectious Diseases* 198: 1502-1513.

50. Luz, P., Mendes, B., Codeco, C., Struchiner, C. & **Galvani, A.P**. (2008) Time series analysis of dengue incidence in Rio de Janeiro, Brazil. *American Journal of Tropical Medicine & Hygiene* 79: 933-939.

49. Basu, S., Maru, D., Poolman & **Galvani, A.P**. (2008) Modeling primary and secondary tuberculosis preventive therapy in antiretroviral treatment clinics. *The International Journal of Tuberculosis and Lung Disease* 13: 652-658.

48. Luz, P., Grinsztejin, B. & **Galvani, A.P**. (2008) Disability adjusted life years lost to dengue in Brazil. *Tropical Medicine & International Health* 14: 237-246.

47. Luz, P., Codeco, C.T., Medlock, J., Struchiner, C.T., Valle, D. & **Galvani, A.P**. (2008) Impact of insecticide interventions on the abundance and resistance profile of *Aedea aegypti*. *Epidemiology and Infection* 12: 1-13.

46. Basu, S. & **Galvani, A.P**. (2008) The transmission dynamics of extensively drug-resistant tuberculosis in South Africa: an operations research and mathematical modeling approach. *Epidemiology and Infection* 136: 1585-1598.

45. Hu, C, Rio, RVM., Medlock, J., Haines, L.R., Nayduch, D., Savage, A.F., Guz, N., Attardo, G.M., Pearson, T.W., **Galvani, A.P**. & Aksoy, S. (2008) Infections with immunogenic trypanosomes reduce tsetse reproductive fitness. *PLoS NTDs.* 2: e192.

44. Poolman, E.M, Elbasha, E. & **Galvani, A.P**. (2008) Vaccination and the evolutionary ecology of Human Papillomavirus. *Vaccine* 18: C25-30.

43. Troy, D. **Galvani, A.P**., Struchiner, C. & Gumel, A. (2008) The evolutionary consequences of vaccination. *Vaccine* 18: C1-3.

42. **Galvani, A.P.**, Reluga, T.C. & Chapman, G.B. (2007) Long-standing influenza vaccination policy is in accord with individual self-interest but not with the utilitarian optimum. *Proceedings of the National Academy of Sciences, USA* 104: 5692-5697.

41. Basu, S., Andrews, J., Poolman, E.M., Gandhi, N.R., Shah, N.S., Moll, A., **Galvani, A.P.** & Friedland, G.H. (2007) The epidemic-level impact of preventing nosocomial transmission of extensively drug-resistant tuberculosis in rural South African district hospitals. *The Lancet* 370: 1500-1507

40. Basu, S. & **Galvani, A.P**. (2007) Extensively drug-resistant tuberculosis in South Africa. *The Lancet* 369: 272-273.

39. Basu, S. & **Galvani, A.P**. (2007) Multiparameter calibration of a natural history model of cervical cancer. *American Journal of Epidemiology* 166: 983-984.

38. Codeco, C., Luz, P.M., Coelho, F. **Galvani, A.P.** & Struchiner, C. (2007) Vaccinating in disease-free regions: a vaccine model with application to yellow fever. *Journal of the Royal Society Interface* 4: 1119-1125.

37. Reluga, T.C., Meza, R., Walton, D.B. & **Galvani, A.P.** (2007) Reservoir Interactions and Disease Emergence. *Theoretical Population Biology* 72: 400-408.

36. Reluga, T.C., Medlock, J., Poolman, E.M. & **Galvani, A.P.** (2007) Optimal timing of disease transmission in an age-structured population. *Bulletin of Mathematical Biology* 69: 2711-2722.

35. Poolman, E.M & **Galvani, A.P**. (2007) Evaluating candidate agents of selective pressure for cystic fibrosis. *Journal of the Royal Society Interface* 4: 91-98.

34. Rainer et al. (Galvani, A.P. 4th of 15 authors) (2007) Discriminating features of SARS from other severe viral respiratory tract infections. *European Journal of Clinical Microbiology and Infectious Diseases* 26: 121-129.

33. **Galvani, A.P.**, Medlock, J. & Chapman, G.B. (2006) The ethics of influenza vaccination. *Science* 313: 758-760.

32. Poolman, E.M. & **Galvani, A.P**. (2006) Modeling targeted ivermectin treatment for controlling river blindness. *American Journal of Tropical Medicine and Hygiene* 75: 921-927.

31. Reluga, T.C., Medlock, J. & **Galvani, A.P.** (2006) A model of spatial epidemic spread when individuals move within overlapping home ranges. *Bulletin of Mathematical Biology* 68: 401-416.

30. Reluga, T.C., Bauch, C. & **Galvani, A.P.** (2006) Evolving public perceptions and stability in vaccine uptake. *Mathematical Biosciences* 204: 185-198.

29. **Galvani, A.P.** & May, R.M. (2005) Dimensions of superspreading. *Nature* 438: 293-295.

28. **Galvani, A.P.** (2005) The role of mutation accumulation in HIV progression. *Proceedings of the Royal Society London* 272: 1851-1858.

27. Novembre, J.P., **Galvani, A.P.** & Slatkin, M. (2005) The geographic spread of the *CCR5-∆32* HIV-resistance allele. *PLoS Biology* 3: e339.

Commentary on this article by Gaggiotti (2006) *Heredity*

26. Elbasha, E. & **Galvani, A.P.** (2005) Vaccinating against multiple HPV types. *Mathematical Biosciences* 197: 88-117. (Journal’s most downloaded article in 2005  
[http://top25.sciencedirect.com/?journal\_id=00255564](https://webmail.med.yale.edu/horde/util/go.php?url=http%3A%2F%2Ftop25.sciencedirect.com%2F%3Fjournal_id%3D00255564&Horde=0b134f8f973b140a318d00dedf042406))

25. Bauch, C.T., Lloyd-Smith, J.O, Coffee, M & **Galvani, A.P.** (2005) Dynamically modelling SARS and respiratory EIDs: past, present and future. *Epidemiology* 16: 791-801.

24. Charleston, M. & **Galvani, A.P.** (2006) A cophylogenetic perspective of host-pathogen evolution. In *Disease evolution: Models, concepts and data analyses* (eds. Z. Feng, U. Dieckmann & S. Levin) American Mathematical Society.

23. **Galvani, A.P.** & Novembre, J.P. (2005) The evolutionary history of the *CCR5-∆32* HIV-resistance mutation. *Microbes and Infection* 7: 301-308.

22. **Galvani, A.P.** (2005) Age-dependent epidemiological patterns and strain diversity in helminth parasites. *Journal of Parasitology* 91: 24-30.

21. Porco, T.C., Lloyd-Smith, J.O., Gross, K.L. & **Galvani, A.P.** (2005) The effect of treatment on pathogen virulence. *Journal of Theoretical Biology* 233: 91-102

20. **Galvani, A.P.** (2004) Emerging infections: What have we learned from SARS? *Emerging Infectious Diseases* 10: 1351-1352.

19. **Galvani, A.P.** & Slatkin, M. (2004) Intense selection in an age-structured population*.* *Proceedings of the Royal Society, Series* B 271: 171-176.

18. **Galvani, A.P.** & Slatkin, M. (2003) Evaluating plague and smallpox as historical selective pressures for the *CCR5-∆32* HIV-resistance allele. *Proceedings of the National Academy of Sciences, USA* 100: 15276-15279.

Commentary on this article by Stumpf & Wilkinson-Herbots (2004) *Trends Ecology & Evolution*

17. Ferguson, N.M., **Galvani, A.P.** & Bush, R.M. (2003) Ecological and immunological determinants of influenza evolution. *Nature* 422: 428-433.

16. **Galvani, A.P.**  (2003) Epidemiology meets evolutionary ecology*.* *Trends in Ecology & Evolution* 18: 132-139. (Cover article)

15. **Galvani, A.P.**, Lei, X. & Jewell, N.P. (2003) Severe acute respiratory syndrome: temporal stability and geographic variation in death rates and doubling times. *Emerging Infectious Diseases* 9: 991-994.

14. Lloyd-Smith, J.O., **Galvani, A.P.** & Getz, W. (2003) Curtailing SARS transmission within a community and its hospital.*Proceedings of the Royal Society London, Series* B 270: 1979-1989. (Cover article)

13. Bauch, C.T., **Galvani, A.P.**  & Earn, D.J.D. (2003) Smallpox vaccination: insights from game theory.*Proceedings of the National Academy of Sciences, USA* 100: 10564-10567.

12. **Galvani**, **A.P.** (2003) Immunity, antigenic diversity and the aggregation of helminth parasites. *Journal of Parasitology* 89: 232-241.

11. Ferguson, N.M. & **Galvani, A.P.** (2003) The impact of antigenic variation on pathogen population structure, fitness and dynamics. p. 403-433. In *Antigenic Variation*(eds. A. Carig & A. Scherf) Harcourt Publishers.

10. **Galvani, A.P.**,Coleman, R.M. & Ferguson, N.M. (2003) The evolution of sex in parasite populations*.* *Proceedings of the Royal Society London, Series* B270: 19-28.

9. **Galvani, A.P.** (2003) Immunology and epidemiology of infectious disease. *The Quarterly Review of Biology* 78: 130-131. (Book review)

8. Bauch, C.T. & **Galvani, A.P.** (2003) Using network models to approximate spatial point-process models. *Mathematical Biosciences* 184: 101-114.

7. **Galvani**, **A.P.**, Coleman, R.M. & Ferguson, N.M. (2001) Antigenic diversity and the selective value of sex in parasites*.* *Special issue in tribute to W.D. Hamilton in Annales Zoologici Fennici*38: 305-314.

6. Gupta, S. & **Galvani, A.P.** (1999) The effects of host heterogeneity on pathogen population structure*.* *Philosophical Transactions of the Royal Society*354: 711-719.

5. **Galvani, A.P.** & Gupta, S. (1998) The effects of mating probability on the population genetics of nematodes. *Journal of Helminthology* 72: 295-300.

4. **Galvani, A.P.** & Johnstone, R. (1998) Sperm allocation in an uncertain world. *Behavioural Ecology and Sociobiology* 44: 161-168.

3. **Galvani, A.P.** & Coleman, R.M. (1998) Do parental convict cichlids of different sizes value the same brood number equally? *Animal Behaviour*56: 541-546.

2. Coleman R.M. & **Galvani, A.P.** (1998) Egg size determines offspring size in Neotropical cichlid fishes. *Copeia* 1998: 209-213.

1. **Galvani, A.P.**  & Coleman, R.M. (1996) Parental size and perceived brood value: Are all eggs created equal? *Proceedings of the International Congress on the Biology of Fishes* 1996: 67-72.

**Research Support**

***Active***

2013-2018 NIH Multi-Scale Modeling U01 (PI: Galvani)

2014-2019 NIH MIDAS U01 (PI: Galvani)

2014-2018 Bill and Melinda Gates Foundation (PI: Galvani)

2015-2018 NSF SES (PI: Galvani)

2016-2017 Fogarty International Center D71 (PI: Galvani)

2015-2018 Gilead Foundation (Yale PI: Galvani)

2012-2020 James B. Crystal & Lillain Yaros Philanthropic Fund (PI: Galvani)

2014-2019 NIH R01 NIADA (Co-PI: Galvani)

2015-2020 NIH U01 NIADA (Co-PI: Galvani)

2008- Garfield Weston Foundation (PI: Galvani)

2007- Notsew Orm Sands Foundation (PI: Galvani)

***Select Completed***

2015-2016 NSF RAPID (PI: Galvani)

2014-2016 Task Force for Global Health (PI: Galvani)

2014-2017 Novartis Foundation (Yale PI: Galvani)

2014-2017 Children’s Investment Fund (Yale PI: Galvani)

2009-2014 NIH MIDAS U01 (PI: Galvani & Meyers)

2013-2015 CDC U01 (Co-I: Galvani, PI: Friedland)

2012-2015 NSF SES (PI: Galvani)

2007-2012 NIH R01 NIAAA (Yale PI: Galvani, PI: Braithwaite)

2006-2013 Notsew Orm Sands Foundation (PI: Galvani)

2007-2012 NIH R01 NIADA (Co-I: Galvani, PI: Aksoy)

2007-2011 NIH R01 NIGMS (PI: Galvani)

2006-2011 NSF SBE (PI: Galvani)

2009-2011 UNICEF/UNDP/World Bank/WHO Programme for Research and Training in Tropical Diseases (Yale PI: Galvani)

2009-2010 NSF RAPID (PI: Galvani)

2009-2010 NIH MIDAS U01 Supplement (PI: Galvani & Meyers)

2008-2010 Howard Hughes Medical Institute (PI: Galvani)

# Training

Advisor to: David Durham (BARDA/HHS), Paula Luz (now Oswaldo Cruz Foundation, Brazil), Tim Reluga (now Penn State), Jan Medlock (now Oregon State), Eunha Shim (now U Tulsa), Yonas Tekle (now Spelman), Yoko Ibuka (now Tohoku University, Japan), Jingzhou Liu (now Goldman Sachs), and Eric Poolman (now University of Oregon), Katie Atkins (now London School of Tropical Medicine and Hygiene), Jennifer Gilbert (now Boston Healthcare Associates), Dan Yamin (now Tel Aviv University), Scott Greenhalgh (now Queens University), Sanjay Basu (now Stanford University), Alyssa Bilinski (now Partners in Health), Danielle Bloch (now New York City Health Department), Alex Rittel (now Defense Health Agency), Evan Orenstein (now Philadelphia Children’s Hospital), Meagan Fitzpatrick (U of Maryland), Martial Ndefo-Mbah (current), Jorge Alfaro-Murillo (current), Chad Wells (current), Abhishek Pandey (current), Alyssa Parpia (current), Vivian Vigloitti (current), Eric Foster (current), Amber Tang (current), Ugochukwu Ugwuowo (current), Erlyn Macarayan (Harvard) and Laura Skrip (now Public Health Foundation of Liberia), Pratha Sah (current)

**Courses & Lectures**

* Studies in Evolutionary Medicine (EMD 695a,b).
* Modeling the epidemiology and evolution of infectious diseases (EMD 565).
* Seminar in epidemiology of microbial diseases (EMD 525).
* Lab and Field Studies in Infectious Disease (EMD 525).
* Undergraduate independent research course (EEB 475)
* Instructor of graduate course ‘Evolution of infectious diseases’, UC Berkeley.
* Outreach: 1000 Girls, 1000 Futures, New York Academy of Sciences

**Advisory roles**

***Advisory Board:*** Merck Advisory Boards (Pneumococcal; Ebola; V212; Vaccine innovations; Improving US vaccine coverage), Latin American Pneumococcal Disease Consortium

***Lead:*** Population Modeling withinNIH Interagency Modeling and Analysis Group

***Ad hoc advisor:*** White House Office of Science and Technology Policy; Global Alliance for Vaccines and Immunization; Liberian Ministry of Health; Israeli Ministry of Health; Costa Rican Ministry of Health; Philippine Ministry of Health; Ministries of Health and Agriculture in India**;** Public Health Foundation of India; Sanofi Pasteur; British Columbia Centre for Disease Control; Italian Ministry of Health; Japanese National Institute of Infectious Diseases; Global Pertussis Initiative; US Senate; Biomedical Advanced Research and Development Authority; World Health Organization

# Selected Organizational Activities

* National Academy of Sciences Colloquia. Washington DC, March 13-15, 2016
* Infectious Disease Modeling Workshop at the University of KwaZulu Natal, Durban. July 6-8, 2009
* Scientific Advisory Board Member of Workshop ‘Mitigating the spread of influenza: lessons learned from past outbreaks, Arizona State University, Tempe. June 25-28, 2009
* Economic Epidemiology Advanced Study Institute, Makerere University, Uganda, 20 July-1 August, 2009
* NIH Microbiology & Infectious Disease Research Committee to review K applications
* NSF-funded DIMACS meeting ‘Addressing social conflict in public health and environmental policy modeling’ at Rutgers University, October 15-17, 2007.
* NSF-funded DIMACS meeting ‘Evolutionary Considerations in Vaccine Use’ at Rutgers University, June 27-30, 2005.

# Selected Invited Presentations

* National Academy of Sciences, March, 2016
* New York Academy of Sciences, July 2015
* World Health Organization, December 2015
* Sanofi Pasteur April 20, 2012
* US Department of Health and Human Services. August 18, 2009
* Health Law Policy and Bioethics Seminar, Harvard Law School. April 29, 2009
* HPA, Epidemiology and Public Health, Yale University. November 17, 2008
* CBB, Yale University. April 3, 2008
* University of Austin, Texas. March 6, 2008
* YIBS, Yale University. April 11, 2008
* Behavioral Epidemiology Workshop, University of Washington, Seattle. June 20, 2006
* Award talk. Fairbanks, Alaska. Evolution meetings. June 13, 2005
* SAMSI, Research Triangle Park, Jan 31, 2005
* Yale University, Medical School, Division of Epidemiology of Microbial Diseases, Feb 18, 2004
* University of Maryland, College Park, Biology Department. Jan 29, 2004.
* University of Wisconsin, Madison, Department of Zoology. Dec 11, 2003
* University of British Columbia, Department of Zoology. Dec 2, 2003
* DIMACS meeting on Genetics and Evolution of Pathogens, Rutgers University. Nov 24, 2003
* University College London, Department of Biology. May 15, 2003
* University of McMaster, Department of Mathematics. March 30th, 2001.
* Workshop on Evolutionary Epidemiology of Strain Structure in Pathogen Populations, University of Warwick. Jan 15th-17th, 2001.
* University of Toronto, Department of Zoology. March 21st, 2001.
* W.D. Hamilton Symposium, University of California at Berkeley. Oct 19th-21st, 2000.
* Harvard School of Public Health. Oct 26th, 2000.