

Leonardo S Bastos

PERSONAL DETAILS

Address Programa de Computação Científica
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ACADEMIC QUALIFICATIONS

Ph.D. in Statistics 2006-2010
The University of Sheffield, UK
Supervisors: Professor Anthony O'Hagan and Professor Jeremy Oakley
Thesis Title: Validating Gaussian Process Models in Computer Experiments

M.Sc. in Statistics 2002-2003
Federal University of Rio de Janeiro, Brazil
Supervisors: Professor Dani Gamerman

B.Sc. in Statistics 1998-2002
Federal University of Minas Gerais, Brazil

PROFESSIONAL EXPERIENCE

Public Health Researcher Fundação Oswaldo Cruz (Fiocruz), Brazil
2012-present

Adjunct professor Universidade Federal Fluminense, Brazil
2010-2012

Assistant professor Universidade Federal do Paraná, Brazil
2006-2006

Research assistant Instituto Brasileiro de Geografia e Estatística (IBGE), Brazil
2005-2006

PUBLICATIONS

Juvanhol, L. L., Melo, E. C. P., Chor, D., Fonseca, M. d. J. M., Rotenberg, L., Bastos, L. S., Mill, J. G., and Griep, R. H. (To appear). Association between demandcontrol model components and blood pressure in the elsa-brasil study: exploring heterogeneity using quantile regression analyses. *Scandinavian Journal of Work, Environment & Health*.

Sperandei, S., Bastos, L. S., Ribeiro-Alves, M., and Bastos, F. I. (2018). Assessing respondent-driven sampling: A simulation study across different networks. *Social Networks*, 52:48–55.

- Faccion, R. S., Bernardo, P. S., de Lopes, G. P. F., Bastos, L. S., Teixeira, C. L., de Oliveira, J. A., Fernandes, P. V., Dubois, L. G., Chimelli, L., and Maia, R. C. (2018). p53 expression and subcellular survivin localization improve the diagnosis and prognosis of patients with diffuse astrocytic tumors. *Cellular Oncology*, 41(2):141–157.
- Cysne-Finkelstein, L., Silva-Almeida, M., Pereira, B. A. S., dos Santos Charret, K., Bertho, Á. L., Bastos, L. S., de Oliveira Pinto, L., de Oliveira, F. O. R., da Souza Pereira, M. C., and Alves, C. R. (2018). Evidence of subpopulations with distinct biological features within a leishmania (viannia) braziliensis strain. *Protist*, 169:107–121.
- Bastos, F. I., Bastos, L. S., Coutinho, C. F., Toledo, L., Mota, J. C., Velasco-de-Castro, C. A., Sperandei, S., Brignol, S. M., Travassos, T. S., Santos, C. M., Malta, M. S., and Divas Research Group (2018). HIV, HCV, HBV and Syphilis among transgender women from Brazil: Assessing different methods to adjust infection rates of a hard-to-reach, sparse population. *Medicine*, 97(1 Suppl):S16–S24.
- Villela, D., Bastos, L., De Carvalho, L., Cruz, O., Gomes, M., Durovni, B., Lemos, M., Saraceni, V., Coelho, F., and Codeço, C. (2017). Zika in rio de janeiro: Assessment of basic reproduction number and comparison with dengue outbreaks. *Epidemiology & Infection*, 145(8):1649–1657.
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- Rizzetto, F., Leal, V. d. O., Bastos, L. S., Fouque, D., and Mafra, D. (2017). Chronic kidney disease progression: a retrospective analysis of 3-year adherence to a low protein diet. *Renal failure*, 39(1):357–362.
- Lima-Neiva, V., Gonçalves, T. C., Bastos, L. S., Gumiel, M., Correia, N. C., Silva, C. C., Almeida, C. E., and Costa, J. (2017). Biology of triatoma sherlocki (hemiptera: Reduviidae) under laboratory conditions: Biological cycle and resistance to starvation. *Journal of medical entomology*, 54(4):831–836.
- Lima, J. B. P., Galardo, A. K. R., Bastos, L. S., da Silva Lima, A. W., and Rosa-Freitas, M. G. (2017). Mosqtent: An individual portable protective double-chamber mosquito trap for anthropophilic mosquitoes. *PLoS neglected tropical diseases*, 11(3):e0005245.
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- Juvanhol, L. L., Lana, R. M., Cabrelli, R., Bastos, L. S., Nobre, A. A., Rotenberg, L., and Griep, R. H. (2016). Factors associated with overweight: are the conclusions influenced by choice of the regression method? *BMC public health*, 16(1):642.
- Coelho, F. C., Durovni, B., Saraceni, V., Lemos, C., Codeço, C. T., Camargo, S., De Carvalho, L. M., Bastos, L., Arduini, D., Villela, D. A., et al. (2016). Higher incidence of zika in adult women than adult men in rio de janeiro suggests a significant contribution of sexual transmission from men to women. *International Journal of Infectious Diseases*, 51:128–132.
- Codeço, C., Villela, D., Gomes, M. F., Bastos, L., Cruz, O., Struchiner, C., Carvalho, L. M., and Coelho, F. (2016). Zika is not a reason for missing the olympic games in rio de janeiro: response to the open letter of dr attaran and colleagues to dr margaret chan, director-general, who, on the zika threat to the olympic and paralympic games. *Memórias do Instituto Oswaldo Cruz*, 111(6):414–415.

- de Carvalho, L. M., Villela, D. A. M., Coelho, F. C., and Bastos, L. S. (2015). Choosing the weights for the logarithmic pooling of probability distributions. Technical Report arXiv:1502.04206, arXiv preprint.
- Carvalho, L. M., Struchiner, C. J., and Bastos, L. S. (2015). Bayesian Inference of Deterministic Population Growth Models. In *Interdisciplinary Bayesian Statistics*, pages 217–228. Springer.
- Bittencourt, S. D. d. A., Gurgel, R. Q., Menezes, M. A. d. S., Bastos, L. S., and Leal, M. d. C. (2015). Neonatal care in Brazil: hospital structure and adequacy according to newborn obstetric risk. *Paediatrics and International Child Health*, 35(3):206–212.
- Bastos, L. S., Oliveira, R. d. V. C. d., and Velasque, L. d. S. (2015). Obtaining adjusted prevalence ratios from logistic regression models in cross-sectional studies. *Cadernos de Saúde Pública*, 31(3):487–495.
- Zapata-Vázquez, R. E., O’Hagan, A., and Bastos, L. S. (2014). Eliciting expert judgements about a set of proportions. *Journal of Applied Statistics*, 41(9):1919–1933.
- Griep, R., Bastos, L. S., Fonseca, M. d. J., Silva-Costa, A., Portela, L., Toivanen, S., and Rotenberg, L. (2014). Years worked at night and body mass index among registered nurses from eighteen public hospitals in Rio de Janeiro, Brazil. *BMC Health Services Research*, 14(1):603.
- De Boni, R. B., Bertoni, N., Bastos, L. S., and Bastos, F. I. (2014). Unrecorded alcohol in Rio de Janeiro: Assessing its misusers through Respondent Driven Sampling. *Drug and Alcohol Dependence*, 139:169–173.
- Bazin, G. R., Gaspar, M. C. S., da Silva, N. C. X. M., Mendes, C. d. C., de Oliveira, C. P., Bastos, L. S., and Cardoso, C. A. A. (2014). Terapia antirretroviral em crianças e adolescentes infectados pelo HIV: o que sabemos após 30 anos de epidemia. *Cadernos de Saúde Pública*, 30(4):687–702.
- Bastos, L. S. and da Rosa, J. M. C. (2013). Predicting probabilities for the 2010 FIFA World Cup games using a Poisson-Gamma model. *Journal of Applied Statistics*, 40(7):1533–1544.
- Paiva, N. S. and Bastos, L. S. (2012). Análise do risco de mortalidade e de morbidade hospitalar do SUS por doenças respiratórias usando modelo de regressão Poisson com efeitos aleatórios. *Revista Brasileira de Estatística*, 2(237):93–115.
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- Bastos, L. S. (2010). *Validating Gaussian Process Models in Computer Experiments*. PhD thesis, University of Sheffield.
- Bastos, L. S. and OHagan, A. (2009). Diagnostics for Gaussian Process Emulators. *Technometrics*, 51(4):425–438.
- Bastos, L. S. and Gamerman, D. (2006). Dynamic survival models with spatial frailty. *Lifetime Data Analysis*, 12(4):441–460.
- Loschi, R. H., Bastos, L. S., and Iglesias, P. L. (2005). Identifying Volatility Clusters Using the PPM: A Sensitivity Analysis. *Computational Economics*, 24(4):305–319.

TEACHING

Lecturer Graduate program of Epidemiology at Brazilian School of Public Health (Fiocruz)
PhD and MSc supervisor
Generalized linear models; Multilevel modelling; Statistics for Epidemiologists; Statistical models I; Applied Bayesian Modelling
 2013-

Adjunct Professor Fluminense Federal University

Undergraduate dissertation Advisor
Probability; Dynamic Linear Models; Survival Analysis; Bayesian inference

2010-2012

Assistant professor

Paraná Federal University

Undergraduate dissertation advisor

Sampling techniques; Design of Experiments

2006

AWARDS AND GRANTS

PhD Studentship Natural Environment Research Council via The University of Sheffield
£ 14,000 per annum stipend and consumables

2006-2010

Installing assistant grant Fundação de Amparo a Pesquisa do Estado do Rio de Janeiro (FAPERJ)
≈ \$2000

2014-2015

Universal CNPq grant

Brazilian Research Council (CNPq)

≈ \$3,000

2014-2015

ABE M.Sc Prize

Brazilian Statistical Association (ABE)

The 3rd. Best M.Sc in Statistics

2003

CODING AND HIGH PERFORMANCE COMPUTING

R	Advanced
BUGS, JAGS, Stan	Advanced
Bash	Proficient
C/C++	Proficient

REFERENCES

Dr. Francisco I Bastos

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Emeritus Professor of Applied Statistics

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