Vanda **Inácio**

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General

EMPLOYMENT

School of Mathematics, University of Edinburgh
READER IN STATISTICS   *08/2023 – present*

School of Mathematics, University of Edinburgh
LECTURER IN STATISTICS   *12/2016 – 07/2023*

Faculty of Mathematics, Pontificia Universidad Catolica de Chile
ASSISTANT PROFESSOR   *10/2012–11/2016*

EDUCATION

University of Lisbon
PHD IN STATISTICS AND OPERATIONS RESEARCH   *2012*

Nova University of Lisbon
MSC IN APPLIED MATHEMATICS   *2008*

Nova University of Lisbon
BSC IN APPLIED MATHEMATICS   *2007*

Teaching and Education Provision

AT UNIVERSITY OF EDINBURGH

- I have created and/or delivered several courses related to practical and methodological statistics:

  - **Statistical Modelling (MATH 11039)**. MSc course, level 11. Spring 2017.
    * Introduced the use of the modern (and open source) R statistical software instead of the SPSS package. This allowed students to have access to a panoply of packages implementing both classic and state of the art statistical methods and to conduct their analysis in a reproducible fashion.
    * CEQ overall indicator for the course: 4.6 (out of 5).

  - **Incomplete Data Analysis (MATH 11185)** MSc course, level 11. Fall 2017, 2018, 2019, 2020.
    * Designed and developed the module and created all materials (lecture slides, workshops, and assignments) from scratch. Module is available to MSc Statistics programmes and Y4/Y5 UG students. Over the years, several students from other Schools (e.g., Informatics, Philosophy, Psychology & Language Sciences) enrolled in the course.
    * Missing values commonly occur in real data and the way they are handled can heavily impact the results of analyses based on such data. Although this is an acknowledged fact, missing data methods are usually not taught at the BSc/MSc level. This course fills this gap and provides unique and excellent skills for handling missing data in statistical analyses, with the R software being extensively used. This module has allowed students to properly deal with missing values in their MSc summer projects.
    * Material for the course available here: `https://github.com/vandainacio/incomplete_data_lectures`
    * For the academic year 2020/21, the lectures were delivered online, with a series of 33 pre recorded videos, available on Youtube: `https://www.youtube.com/channel/UCNFDg_OAhBDgyHQH_ah_WIg/videos`.
    * CEQ overall indicators: course: 4.1 (2017/18), 4.5 (2018/19), 4.4 (2019/20), 4.5 (2020/21) lecturer: 4.4 (2017/18), 4.6 (2018/19), 4.6 (2019/20), 4.7 (2020/21). All out of 5.

  - **Bayesian Data Analysis (MATH 11175)** MSc course, level 11. Spring 2018.

* Updated module content and created an entire new set of slides and of practical exercise sheets, reflecting the advances in the use of Bayesian modelling in applied areas. Introduced the use of the modern `JAGS` (and `rjags`) software, which has allowed students to easily implement state of the art Bayesian approaches in their MSc dissertations.
* Material for the course available here: `https://github.com/vandainacio/Bayesian-Data-analysis`
* CEQ overall indicators: course: 4.2, lecturer: 4.4. Both out of 5.

– **Biostatistics (MATH 11230)**. MSc course, level 11. Fall 2021, 2022.
* Designed and developed the module and created all materials (lecture slides, workshops, and assignments) from scratch. Course is available to MSc Statistics programmes and Y4/Y5 UG students. In the 2021/22 edition, one student doing a PhD in Social Work and another one from the CDT Biomedical Artificial Intelligence enrolled in the course.
* Provides an important blend of qualitative and quantitative skills/techniques commonly used in biomedical and epidemiological applications. Topics, such as, measures of disease occurrence, measures of disease-exposure association, study design, confounding and causality, and survival analysis, the need for which has been made crystal clear by the current pandemic, are covered in the course.
* Closely aligns with the *American Statistical Association Curriculum Guidelines for Programmes in Statistical Science*, namely that students *must be able to understand issues of design, confounding, and bias* and that *data should be a major component of statistics courses*.
* Material for the course available here: `https://github.com/vandainacio/Biostatistics`
* CEQ not administered in 2021/22.

– **Applied Statistics (MATH 10096)** UG course, level 10. Spring 2024, 2025.
* Designed a revamped version of the module and co-created (with Prof. Simon Wood) the course materials from scratch.
* Introduces linear and generalized linear models in an unified way. Introduces also the fundamental notions of mixed effects models.
* `R` statistical software extensively used.
* Material for the course available here: `https://github.com/vandainacio/Applied-Statistics/`

• EUSA award nominations:

– 2023/24: Nominated for Teacher of the Year.
"*Vanda delivers the outstanding course Applied Statistics this year. Besides, she was my personal tutor last year, and she always replied promptly when I was in need.*"

– 2020/21: Nominated for Teacher of the Year.
"*Well structured and organised lectures, delivered in a clear way. Great support and availability throughout the semester. Prompt and kind response to emails. Approachable and Engaging attitude during workshops, tutorials, office hours. Empathy for students, their needs and potential problems.*"

– 2018/19: Nominated for Best Supervisor Award.
"*Vanda is a terrific supervisor. She's always very kind and helpful and when we have our PhD meetings I feel like I am part of a very good team. I am very lucky to have her supervising my PhD project.*"

– 2017/18: Nominated for Best Supervisor Award.
"*She shows interest and enthusiasm for my research by setting a high but achievable targets every time we meet. She's an excellent supervisor.*"

• Tutor for Statistics Y2 (2016/17), Time Series Analysis and Forecasting (2016/17), Introduction to Linear Algebra (2017/18), The Analysis of Survival Data (2017/18, 2018/19, 2019/20), Statistical Consultancy (2019/20), Statistical Methodology (2020/21, 2022/23), Bayesian Theory (2020/21).

• Supervised seven MMaths dissertations, five UG group projects, and three individual UG projects.

• MSc supervision:

- Supervisor of four SOR (Statistics and Operations Research) dissertations. One project led to article 7 in the publications' list.
- Second supervisor of one SOR dissertation.
- Internal supervisor of three SOR dissertations.
- Lead supervisor of the consultancy style project entitled *Liver cancer: investigating the risk factors* for the entire cohort of the 2017/18 edition of the MSc in Statistics with Data Science (35 students). The academic partner providing the data and bringing the research questions was Dr Tom Bird from CRUK Beatson Institute.
- Lead supervisor of the consultancy style project entitled *Understanding the impact of age demographics on future length of stays in Scottish hospitals*. MSc in Statistics with Data Science (26 students). Academic year: 2022/23. Industry partner: Public Health Scotland.
- Co-supervisor of consultancy style dissertations in 2018/19, 2020/21, and 2021/22.

AT PONTIFÍCIA UNIVERSIDADE CATÓLICA DO CHILE

- I have created and/or delivered (in both cases I created the lectures' material from scratch) several modules related to practical, methodological, and computational statistics as well as courses on actuarial sciences:
  - **Advanced Computational Statistics**. MSc level. Spring 2013.
  - **Survival Analysis**. MSc level. Fall 2013. Created from scratch.
  - **Introduction to Computational Statistics**. BSc level. Fall 2013, 2014, 2015, 2016.
  - **Stochastic Simulation**. BSc level. Spring 2015, 2016. Created from scratch.
  - **Actuarial Models I**. MSc level. Fall 2015. Created from scratch.
  - **Actuarial Models II**. MSc level. Spring 2016. Created from scratch.

Administrative Jobs at UoE

- **Statistics group seminar organiser** (2017)
- **Good Practice Committee** member (2017/18, 2018/19, and 2019/20)
- **MSc project organiser** (2018/19)
- **Year 3 organiser** (2020/21, 2021/22, 2022/23, 2023/24)
- **Data and Decisions Teaching Theme Representative** (2020/21, 2021/22, 2022/23, 2023/24)
- **Director of Students** (30% FTE, 2024/25–present)

Research

- My main area of research is Biostatistics and, in particular, most of my research is focused on evaluating the accuracy of diagnostic tests/biomarkers to distinguish between different disease stages and how external factors (e.g., age and gender) might impact such accuracy.

- I pioneered the development of methods to conduct inference about several summary measures of diagnostic accuracy (partial area under the ROC curve, Youden index, covariate-adjusted ROC curve) that make no assumptions about the distribution of test outcomes in each population (e.g., diseased and nondiseased) and about the relationship between covariates and test outcomes. I was the first researcher to develop (summary) measures of diagnostic accuracy that consider a functional (e.g., a curve) covariate.

- **Research grants**
  - **Awarded**
    * 2013–2016 *Bayesian flexible regression models for medical diagnostic data: new developments and applications.* **Principal investigator**. Funding agency: CONICYT (Chilean National Science Foundation), Chile. Budget: ≈ 100.000 USD.
    * 2018–2019 *Validating and improving serum biomarkers for liver cancer surveillance.* **Co-investigator**. Funding agency: CSO Funded Research, NHS Scotland, UK. Budget: 15500£.
    * 2018–2022 *Data Fusion and Calibration Methods for Spatial Risk Analysis.* **Co-investigator**. Funding agency: FCT (Portuguese National Science Foundation), Portugal. Budget: ≈ 238500 €.
    * 2023–2026 *Robust approaches for the analysis of agreement between clinical measurements: development of guidance and software tools for researchers.* **Co-investigator**. Funding agency: Medical Research Council, UK. Budget ≈ 350000 £.
    * 2023–2025 *How good is this medical device? Bayesian mixed models for agreement measures*. International Exchange Grant, Royal Society. Budget: 11 798 £.

- **Supervision experience**
  - Current PhD students as principal supervisor: Zhaoxi Zhang (started September 2022).
  - Past PhD students as principal supervisor:
    * Nicolò Margaritella (2016–2020). First job after graduating: Lecturer in Statistics at the University of St Andrews.
    * Javier E. Garrido-Guillén (2017–2021, fully funded from CONACyT, Mexico). First job after graduating: Assistant Professor at Tecnologico de Monterrey, Mexico.

Academic Leadership

- I was one of the **leading local organisers for the 2018 ISBA World Meeting**, Edinburgh, June 2018 (No. Delegates $\approx$ 750).

- **Member of the Editorial Board** (as Associate Editor) of *Statistical Methods in Medical Research* (January 2019 to July 2021) and of *RevStat Statistical Journal* (January 2019 to Feb 2021).

- I have **refereed journal articles** for: Annals of Applied Statistics, Bayesian Analysis, Biometrical Journal, Biometrics, Biostatistics, Communications in Statistics—Theory and Methods, Computational Statistics and Data Analysis, Journal of the American Statistical Association, Journal of Applied Statistics, Journal of Statistical Theory and Practice, RevStat Statistical Journal, Statistics in Medicine, Statistical Methods in Medical Research, Statistical Modelling, Statistica Neerlandica, The American Statistician. I have also **refereed a grant proposal** for the *Medical Research Council*.

- **Editor** (joint with M. de Carvalho and W. González-Manteiga) of the **special issue** "Statistical Models for Diagnosis and ROC Analysis,'' *RevStat—Statistical Journal*, Vol. 12.

- **External PhD examiner** (February 2021), University of Santiago de Compostela, Spain.

- **Book editor** for *Journal of Agricultural, Biological, and Environmental Statistics* (2024–present).

- **Member of the Scientific Committee** of the XXVII meeting of the Portuguese Statistical Society (2025).

External Recognition/Esteem

- **Invited session talks at international conferences**:
  - 18th International Conference on Statistics and Computing, European Research Consortium for Informatics and Mathematics, London, 2024.
    Density regression via Dirichlet process mixtures ofnormal structured additive regression models.
  - 2024 International Society for Bayesian Analysis World Meeting, Venice, 2024.
    Density regression via Dirichlet process mixtures of normal structured additive regression models.
  - 2023 IMS International Conference on Statistics and Data Science (ICSDS), Lisbon, 2023.
    The underlap coefficient as a measure of a biomarker's discriminatory ability in a multi-cclass disease setting.
  - 15th International Conference on Statistics and Computing, European Research Consortium for Informatics and Mathematics, London, 2022.
    Bayesian nonparametric inference for the overlap coefficient: Withan application to disease diagnosis.
  - Meeting on Statistics and Applied Probability, Universidade do Minho, 2022 (invited speaker).
    Induced nonparametric ROC surface regression.
  - 31st International Biometric Conference, Riga, 2022.
    Induced nonparametric ROC surface regression.
  - XV Congreso Galego de Estatística e Investigación de Operacións, Santiago de Compostela, 2021.
    Bayesian nonparametric inference for the overlap coefficient: with an application to disease diagnosis.
  - 12th International Conference on Statistics and Computing, European Research Consortium for Informatics and Mathematics, London, 2019.
    Bayesian nonparametric inference for the covariate-adjusted ROC curve.
  - 11th International Conference on Statistics and Computing, European Research Consortium for Informatics and Mathematics, Pisa, 2018.
    Bayesian nonparametric inference for the coefficient of overlap.

- International Society for Bayesian Analysis 2018 World Meeting, Edinburgh, 2018.
  Bayesian nonparametric inference for the covariate-adjusted ROC curve.
- 4th International Conference of the International Society for Nonparametric Statistics, Salerno, 2018.
  Bayesian nonparametric inference for the covariate-adjusted ROC curve.
- 10th International Conference on Statistics and Computing, European Research Consortium for Informatics and Mathematics, London, 2017.
  Bayesian nonparametric inference for the three-class Youden index and its associated optimal cut-points.

- 9th International Conference on Statistics and Computing, European Research Consortium for Informatics and Mathematics, Seville, 2016.
  Nonparametric Bayesian regression analysis of the Youden index.
- Latent Variables 2016 Conference, Columbia, South Carolina, 2016.
  Nonparametric Bayesian regression analysis of the Youden index.
- International Society for Bayesian Analysis 2016 World Meeting, Sardinia, 2016.
  Nonparametric Bayesian regression analysis of the Youden index.
- 8th International Conference on Statistics and Computing, European Research Consortium for Informatics and Mathematics, London, 2015.
  Bayesian bootstrap inference for the ROC surface.
- Joint Statistical Meetings 2014, Boston, 2014.
  Bayesian nonparametric ROC regression modelling.
- 2nd Conference of the International Society for Nonparametric Statistics, Cadiz, 2014.
  Functional partial area under the curve regression: a metabolic syndrome case study.
- 5th International Conference on Statistics and Computing, European Research Consortium for Informatics and Mathematics, Oviedo, 2012.
  Modeling the probabilistic index in the presence of a functional covariate .
- 4th International Conference on Statistics and Computing, European Research Consortium for Informatics and Mathematics, London, 2011.
  Extending induced ROC methodology to the functional context.

- **Invited seminar talks** at:
  - BNP-ISBA webinar (online), 2025.
    Density regression via Dirichlet process mixtures of normal structured additive regression models.
  - Department of Mathematics, Nova School of Science & Technology, 2023.
    The underlap coefficient as a measure of a biomarker's discriminatory ability in a multi-cclass disease setting.
  - Chair of Statistics, University of Gottingen, 2023.
    Density regression via penalised splines dependent Dirichlet process mixture of normals models.
  - Department of Statistical Science, University College London, 2023.
    Induced nonparametric ROC surface regression.
  - High-Dimensional and Functional Data Research Group, University College London.
    Density regression via penalised splines dependent Dirichlet process mixture of normals models.
  - Caucus for Women in Statistics Webinar, 2022.
    ROCnReg: an R package for Receiver Operating Characteristic curve inference with and without covariates. Recording available here: www.youtube.com/watch?v=ifsmVKafdVA&t=1730s
  - Department of Statistics and Operations Research. Universidade de Lisboa, 2022.
    The covariate-adjusted ROC curve: the concept and its importance and a new Bayesian estimator.
  - Department of Statistics, PUC Chile, 2021.
    Flexible nonparametric Bayesian density regression via dependent Dirichlet process mixture models and penalised splines.
  - Department of Mathematics, Nova School of Science & Technology, 2021.
    Flexible nonparametric Bayesian density regression via dependent Dirichlet process mixture models and penalised splines.
  - Department of Statistics and Operations Research, University of Santiago de Compostela, 2021.
    Flexible nonparametric Bayesian density regression via dependent Dirichlet process mixture models and

penalised splines.

– Department of Mathematics, Technical University of Munich, 2020.
Flexible nonparametric Bayesian density regression via dependent Dirichlet process mixture models and penalised splines.

– Department of Statistics, Humboldt University of Berlin, 2019.
Density regression via penalised splines dependent Dirichlet process mixtures of normals models.

– Department of Actuarial Mathematics and Statistics, Heriot Watt University, 2018.
Bayesian nonparametric inference for the covariate-adjusted ROC curve.

– School Mathematics and Statistics, University of Glasgow, 2018.
Bayesian nonparametric inference for the covariate-adjusted ROC curve.

– Department of Statistical Science, University College London, 2018.
Bayesian nonparametric inference for the covariate-adjusted ROC curve.

– Southampton Statistical Sciences Research Institute, University of Southampton, 2018.
Bayesian nonparametric inference for the covariate-adjusted ROC curve.

– School of Mathematics, Statistics & Actuarial Science, University of Kent, 2018.
Bayesian nonparametric inference for the covariate-adjusted ROC curve.

– Edinburgh Clinical Trials Unit, University of Edinburgh, 2018.
Bayesian flexible methods for ROC curves and surfaces.

– Department of Mathematics, Technical University of Lisbon, 2018.
Bayesian nonparametric inference for the covariate-adjusted ROC curve.

– Department of Decision Sciences, Bocconi University, 2017.
Nonparametric Bayesian Covariate-Adjusted Estimation of the Youden Index.

– Department of Statistics and Operations Research, Universidade de Lisboa, 2017.
Robust Inference for ROC Regression.

– Department of Statistics, University of California Santa Cruz, 2016.
Nonparametric Bayesian regression analysis of the Youden index.

– Department of Biostatistics, Virginia Commonwealth University, 2016.
Nonparametric Bayesian regression analysis of the Youden index.

– Department of Statistics, Florida State University, 2016.
Nonparametric Bayesian regression analysis of the Youden index.

– Department of Statistics, Oregon State University, 2015.
Nonparametric Bayesian regression analysis of the Youden index.

– Department of Statistics, Universidade Federal do Rio de Janeiro, 2015.
Partial functional area under the curve regression: a metabolic syndrome case study.

– Department of Public Health, Pontificia Universidad Católica de Chile, 2014.
Partial functional area under the curve regression: a metabolic syndrome case study.

– Department of Statistics, University of Nottingham, 2014.
Partial functional area under the curve regression: a metabolic syndrome case study.

– Department of Statistics, Pontificia Universidad Católica de Chile, 2012.
Extending induced ROC methodology to the functional context.

– Department of Statistics, Universidad Carlos III de Madrid, 2012.
Extending induced ROC methodology to the functional context.

– Department of Epidemiology and Biostatistics, University of South Carolina, 2012.
Extending induced ROC methodology to the functional context.

– Department of Statistics and Operations Research, Universidade de Lisboa, 2012.
Bayesian nonparametric ROC regression modelling.

– Department of Statistics, University of South Carolina, 2011.
Flexible ROC regression models: a Bayesian nonparametric approach.

– Department of Statistics and Operations Research, University of Santiago de Compostela, 2011.
Nonparametric Bayesian estimation of the three-way ROC surface.

- **Invited short courses**:
  – *An Introduction to Bayesian Nonparametric Methods with Applications in Biostatistics*, NovaMath, Center

for Mathematics and Applications, Nova School of Science & Technology, 2023.
Material available here: `https://github.com/vandainacio/BNP_FCT`

– *An Introduction to Bayesian Nonparametric Methods*, Basque Center for Applied Mathematics, 2020.

– *An Introduction to Bayesian Nonparametric Methods*, CLATSE, Peru, 2016.

– *Bayesian Nonparametrics: a Soft Introduction*, XIII Brazilian Meeting on Bayesian Statistics, 2016.
Recording available here: `https://www.youtube.com/watch?v=1ERjl6HJRxw&t=5512s`

– *Flexible Bayesian Methods for Diagnosis and ROC Curve Estimation*, University of Lisbon, 2014.

Publications

- **Manuscripts Published**

1. Guevara, I., Inacio, V., & Gutiérrez, L. (2025). Bayesian model selection for analyzing predictor-dependent directional data. *Statistics and Computing*, *35*(5), 1–16.
2. Sharifi Far, S., Inácio, V., Evkaya, O., & Lenzi, A. (2025). Hackathons in statistics and data science education and experiences from ASA DataFest. *Teaching Statistics*.
3. Rodríguez-Álvarez, M. X., Inácio, V., & Klein, N. (2025). Density regression via Dirichlet process mixtures of normal structured additive regression models. *Statistics and Computing*, *35*(2), 47.
4. Wade, S., & Inácio, V. (2025). Bayesian dependent mixture models: A predictive comparison and survey. *Statistical Science*, *40*(1), 81–108.
5. Inácio, V., Carvalho, M. de, Jackson, O., McMahon, S., & Cockell, C. S. (2024). The need for large sample numbers to demonstrate that Martian environments are lifeless. *Nature Astronomy*, *8*(12), 1493–1495.
6. Sharifi Far, S., Inácio, V., Paulin, D., Carvalho, M. de, Augustin, N. H., Allerhand, M., & Robertson, G. (2023). Consultancy style dissertations in statistics and data science: Why and how. *The American Statistician*, *77*(3), 331–339.
7. Inácio, V., & Rodríguez-Álvarez, M. X. (2022). The covariate-adjusted ROC curve: The concept and its importance, review of inferential methods, and a new Bayesian estimator. *Statistical Science*, *37*(4), 541–561.
8. Inácio, V., & Garrido Guillén, J. E. (2022). Bayesian nonparametric inference for the overlap coefficient: With an application to disease diagnosis. *Statistics in Medicine*, *41*(20), 3879–3898.
9. Inácio, V., M. Lourenço, V., Carvalho, M. de, Parker, R. A., & Gnanapragasam, V. (2021). Robust and flexible inference for the covariate-specific receiver operating characteristic curve. *Statistics in Medicine*, *40*(26), 5779–5795.
10. Rodríguez-Álvarez, M. X., & Inácio, V. (2021). ROCnReg: An R Package for Receiver Operating Characteristic Curve Inference With and Without Covariates. *The R Journal*, *13*(1), 525–555. `https://doi.org/10.32614/RJ-2021-066`
11. Margaritella, N., Inácio, V., & King, R. (2021). Parameter clustering in Bayesian functional principal component analysis of neuroscientific data. *Statistics in Medicine*, *40*(1), 167–184.
12. Inácio, V., Rodriguez-Alvarez, M. X., & Gayoso-Diz, P. (2021). Statistical evaluation of medical tests. *Annual Review of Statistics and Its Application*, *8*, 41–67.
13. Parker, R. A., Scott, C., Inácio, V., & Stevens, N. T. (2020). Using multiple agreement methods for continuous repeated measures data: A tutorial for practitioners. *BMC Medical Research Methodology*, *20*(1), 1–14.
14. Castro, L. M., Wang, W.-L., Lachos, V. H., Inácio de Carvalho, V., & Bayes, C. L. (2019). Bayesian semiparametric modeling for HIV longitudinal data with censoring and skewness. *Statistical Methods in Medical Research*, *28*(5), 1457–1476.
15. Hanson, T., Zhou, H., & Inácio de Carvalho, V. (2018). Bayesian nonparametric spatially smoothed density estimation. In *New Frontiers of Biostatistics and Bioinformatics* (pp. 87–105). Springer.
16. Inácio de Carvalho, V., & Rodríguez-Álvarez, M. X. (2018). Statistical evaluation of medical diagnostic tests. *Wiley StatsRef: Statistics Reference Online*, 1–13.
17. Inácio de Carvalho, V., Carvalho, M. de, & Branscum, A. (2018). Bayesian bootstrap inference for the receiver operating characteristic surface. *Stat*, *7*(1), e211.
18. Inácio de Carvalho, V., & Branscum, A. J. (2018). Bayesian nonparametric inference for the three-class youden index and its associated optimal cutoff points. *Statistical Methods in Medical Research*, *27*(3), 689–700.
19. Inácio de Carvalho, V., Carvalho, M. de, & Branscum, A. J. (2017). Nonparametric bayesian covariate-adjusted estimation of the youden index. *Biometrics*, *73*(4), 1279–1288.

20. Inácio de Carvalho, V., Carvalho, M. de, Alonzo, T. A., & González-Manteiga, W. (2016). Functional covariate-adjusted partial area under the specificity-ROC curve with an application to metabolic syndrome diagnosis. *The Annals of Applied Statistics*, *10*(3), 1472–1495.

21. Inácio de Carvalho, V., Jara, A., & Carvalho, M. de. (2015). Bayesian nonparametric approaches for ROC curve inference. In *Nonparametric Bayesian Inference in Biostatistics* (pp. 327–344). Springer.

22. Inácio de Carvalho, V., Jara, A., Hanson, T. E., & Carvalho, M. de. (2013). Bayesian nonparametric ROC regression modeling. *Bayesian Analysis*, *8*(3), 623–646.

23. Inácio, V., González-Manteiga, W., Febrero-Bande, M., Gude, F., Alonzo, T. A., & Cadarso-Suárez, C. (2012). Extending induced ROC methodology to the functional context. *Biostatistics*, *13*(4), 594–608.

24. Inácio, V., Turkman, A. A., Nakas, C. T., & Alonzo, T. A. (2011). Nonparametric bayesian estimation of the three-way receiver operating characteristic surface. *Biometrical Journal*, *53*(6), 1011–1024.

- **Contribution to Discussions**
  - Inacio, V., de Carvalho, M., and Amaral Turkman, A. (2012) Discussion of "Probabilistic index models'' by Thas, O., de Neve, J., Clement, L., and Ottoy, J.P., *Journal of the Royal Statistical Society, Ser.* B, 74, 659–661.

- **Submitted papers**
  - Margaritella, N., Inacio, V., King R. A Bayesian functional PCA model with multilevel partition priors for group studies in neuroscience. ArXiv: `https://arxiv.org/abs/2312.16739`

- **Book in preparation**
  - Inácio, V., Johnson, W.O., de Carvalho, M., Branscum, A.J. (2023+). *Flexible Bayesian Models for Medical Diagnostic Data*. CRC Chapman & Hall.

- **Software (R packages)**
  - Rodriguez-Alvarez, M. X., and Inácio, V. (2020). ROCnReg: ROC Curve Inference with and without Covariates (Version 1.0-7).
    `https://CRAN.R-project.org/package=ROCnReg`
    Total number of downloads (22/05/2025): 29k
  - Rodriguez-Alvarez, M. X., and Inácio, V. (2025). DDPstar: Density Regression via Dirichlet Process Mixtures of Normal Structured Additive Regression Models (Version 1.0-1).
    `https://cran.r-project.org/web/packages/DDPstar/index.html`
    Total number of downloads (22/05/2025): 2345

Other Stuff

- **Co-organiser of ASA DataFest 2024, 2025 @ EDI**.
  Associated blogpost: [click here]

- Collaborated with the **Scottish National Blood Transfusion Service, NHS**, on a project investigating survival time in patients who received a blood transfusion, and how factors such as age at first transfusion, gender, and number of red blood cell units received affect survival.

  - This work was undertaken at the request of the Infected Blood Inquiry
    `https://www.infectedbloodinquiry.org.uk/`
    Report available here.
  - Announcement of final decisions [click here]
  - BBC cover [click here]