Antoine **Barbieri**

https://www.math.u-bordeaux.fr/ abarbieri/

Personal Info

Born April 10, 1989
Licence driving (car & motobike)

Contact

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Programming

R, SAS, JMP
STATA, LaTeX,
BUGS language

Languages

French mother tongue
English professional

Personal Skills

Team player,
curiosity, flexible.

Interests

Travels, tennis,
handball, ski.

Other Info

Handball: vice champion of France (2006) and champion of France (2007) -18s with Montélimar-Cruas

Experience

09/18 - now **Maître de conférences** — Université de Bordeaux - INSERM U1219
Research activity: Bordeaux population health center (Biostatistic team)
Teaching activity: Unité de Formation Mathématiques et Interactions.

02/18 - 08/18 **Post-doctoral researcher** — INSERM UMRS1138, Paris
Keywords: Joint model, multivariate responses, Bayesian variable selection.

10/16 - 12/17 **Post-doctoral researcher** — Université Catholique de Louvain, Belgique
Keywords: Joint modeling, mixture cure model, MCMC methods, prediction.

03/16 - 06/16 **Biostatistician** — Biometrics unit, ICM, Montpellier, France
Identification of patient profiles according to the quality of life data.

2013 - 2016 **Ph.D. in Biostatistics** — UM & ICM, Montpellier, France
Thesis entitled: Longitudinal methods for the analysis of the health-related quality of life in oncology.
Keywords: latent variable regression models, longitudinal analysis, categorical data, oncology.

03/12 - 08/12 **Internship in M.Sc** — R&D Sanofi, Montpellier, France
Development and implementation of fully objective Bayesian methods for the Behrens-Fisher problem during research experiments. *Keywords: Bayesian model choice, MCMC algorithm, prior calibration.*

Education

2013 - 2016 **Ph.D. in Biostatistics** — University of Montpellier, France
Supervised by Christian Lavergne and Caroline Mollevi, at the *Institut Montpelliérain Alexander Grothendieck* in collaboration with the *Institut régional du Cancer Montpellier (ICM) - Val d'Aurelle*.

2010 - 2012 **Master's Degree in Biostatistics**
University of Montpellier 2 (science and technology) in partnership with the SupAgro Montepllier, Montpellier, France.

2007 - 2010 **Bachelor's Degree in Mathematics, Computing and Social Sciences**
Specializing in mathematics, programming and cognitive sciences.
University of Pierre Mendès France, Grenoble, France.

Teaching

2018 - 2019 **Teaching assistant (128h)** — Université de Bordeaux, France
Teachings for Bachelor's and master degree students in statistics
Regression models, hypothesis tests, time series.

2016 - 2017 **Teaching assistant (60h)** — Université Catholique de Louvain, Belgium
Tutorial Classes (TC) for Bachelor's degree students in Probabilities and Biostatistics

2013 - 2016 **Teaching assistant (130h30)** — University of Montpellier, France
TC for Bachelor's degree students in Mathematics for biologist, Descriptive statistics and probability, Probabilities, Introduction to R.

Scientific Productions (Main selected)

Publications, articles in peer-reviewed journal

• Barbieri A and C Legrand. Joint longitudinal and time-to-event cure models to improve the assessment of being cured. Accepted in *Statistical Methods in Medical Research*, 2019.
• Barbieri A, Tami M, Bry X, Azria D, Gourgou S, Mollevi C and Lavergne C. EM algorithm estimation of a structural equation model for the longitudinal study of the quality of life. *Statistic in Medicine*, 2018.
• Barbieri A, Peyhardi J, Lavergne C, Conroy T, Gourgou S and Mollevi C. Item response models for the longitudinal analysis of health-related quality of life in cancer clinical trials. *BMC medical research methodology*, 2017.
• Barbieri A, Anota A, Conroy T, Gourgou S, Juzyna B, Bonnetain F, Lavergne C and Mollevi C. Applying longitudinal model from Item Response Theory to assess the Health-Related Quality of Life in PRODIGE 4 / ACCORD 11 randomized trial. *Medical Decision Making*, 2016.
• Barbieri A, Marin J.M and Florin K. A fully objective Bayesian approach for the Behrens-Fisher problem using historical studies. *Under revision in Journal de la SFDS*.

Communications in international events

• [Poster] Barbieri A, Legrand C. Joint longitudinal and survival-cure models to improve the assessment of being cured in oncology studies. *38th Annual Conference of the International Society for clinical Biostatistics (ISCB)*, July 2017, Vigo (Spain). *(Best Poster Award in the session Bayesian methods and joint modelling)*.
• [Orale] Barbieri A et al. Mixed-effects regression Models for longitudinal Analysis of Quality of Life in Oncology. *21th Annual Conference of the International Society for Quality of Life Research (ISOQOL)*, October 2014, Berlin (German).
• [Orale] Barbieri A et al. Random effect Models for Quality of Life Analysis in Oncology. *35th Annual Conference of the International Society for clinical Biostatistics (ISCB)*, August 2014, Vienna (Austria).

Oral communications in French events

• Barbieri A et al. Étude longitudinale de la Qualité de Vie en cancérologie par mélanges de modèles mixtes (simulation study). *48ème journée de statistique de la SFDS.* June 2016, Montpellier.
• Barbieri A et al. Partial Credit Model with random effects for Quality of Life longitudinal analysis. *Workshop Evaluation et analyse de la qualité de vie : nouveaux développements méthodologiques*, April 2014, Montpellier.

Workshop

• Workshop INSERM 255, guest speaker, May 2019.

Seminars

• Statistical seminar of Bordeaux, Université de Bordeaux, November 2018.
• Seminar ISBA, Université Catholique de Louvain, November 2016.
• Seminar EPSILON, Université Paul-Valéry Montpellier 3, March 2016.
• Seminar for Ph.D. students, University of Montpellier, April 2014.

Supervision

2015 **Master Student** ICM - Val d'Aurelle, France
Laila Abach, Application and comparison of three statistical methods for the longitudinal analysis of the health-related quality of life on clinical trial data. *(Co-supervision – Master 2 Applied statistics)*