Curriculum Vitae

FREDERIC BERTRAND

38 scientific articles
14 books + 3 books editor
14 software (on CRAN)
64 contributions to international conferences
25 consulting experiences with companies
Referee for ANR, HCERES and CIR.

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20/01/1978

PROFESSIONAL EXPERIENCE

2021 – up to now	**Project leader PEA IMPACT**
2021 – up to now	**Head of the OSS speciality, Doctoral School 361 SPI**
2020 – up to now	**Research and doctoral supervision grants** *(Prime d'Encadrement Doctoral et de Recherche)*
2019 – up to now	**University of Technology of Troyes, Troyes, France**
	Full Professor *(Professeur des Universités)*
2016 – 2020	**Research and doctoral supervision grants** *(Prime d'Encadrement Doctoral et de Recherche)*
2012 – 2016	**Reward for scientific excellence** *(Prime d'Excellence Scientifique)*
2011 – 2019	**Elected member of the Conseil National des Universités, 26th section**
2008 – 2019	**University of Strasbourg/ Department of Mathematics, Strasbourg, France**
	Assistant Professor *(Maître de Conférences)*

EDUCATION

2018	**Habilitation thesis** (*Habilitation à diriger des recherches*)**, Strasbourg , France**
2007	**PhD. In Applied Mathematics, specialty Statistics, Strasbourg, France**
2002	**Agrégation Mathematics** (a highly competitive French Teaching examination)
1999-2003	**Ecole normale supérieure de Lyon, Lyon, France**
	(a higher education establishment with a very highly competitive admission examination)

RESEARCH EXPERTISE

Design of experiments, Applied Modeling: Linear and Generalized Linear Models, Edgeworth Expansions, Partial Least Squares, Bootstrap Techniques, Sparse Models. Statistical Learning.

CUMULATED DOCTORAL AND POST-DOCTORAL SUPERVISION

Supervisor of four PhD students (50% each). Four post-doctoral researchers grants, two PhD, a research engineer grant, two Labex PhD grants and four CIFRE PhD grants.

RECENT PUBLICATIONS (HTTPS://CV.ARCHIVES-OUVERTES.FR/FBERTRAN)

R. Carapito, I. Aouadi, ..., M. Maumy-Bertrand, F. Bertrand, ... et S. Bahram. The MHC class I MICA gene is a histocompatibility antigen in kidney transplantation, *Nature Medicine*, accepted (2022). **Impact Factor 53.44**.

F. Bertrand, I. Aouadi, N. Jung, R. Carapito, L. Vallat, S. Bahram, M. Maumy-Bertrand, SelectBoost: a general algorithm to enhance the performance of variable selection methods, *Bioinformatics*, btaa855 (2020).

T.-A. Nengsih, F. Bertrand, M. Maumy-Bertrand, N. Meyer. Determining the Number of Components in PLS Regression on Incomplete Data. *Statistical Applications in Genetics and Molecular Biology*, 18(6), (2019).

L.-M. Fornecker, L. Muller, F. Bertrand, N. Paul, A. Pichot, R. Herbrecht, M.-P. Chenard, L. Mauvieux, L. Vallat, S. Bahram, S. Cianférani, R. Carapito, Ch. Carapito. Multi-omics dataset to decipher the complexity of drug resistance in diffuse large B-cell lymphoma. *Scientific Report*, 9(1):895 (2019).

J. Magnanensi, F. Bertrand, M. Maumy-Bertrand et N. Meyer. A new universal resample stable bootstrap-based stopping criterion for PLS component construction.*Statistics and Computing*, 27(3): 757-774 (2017).

P. Bastien, F. Bertrand, N. Meyer, M. Maumy-Bertrand. Deviance residuals based sparse PLS and sparse kernel PLS regression for censored data. *Bioinformatics*, 31(3):397-404 (2015)