

Sébastien Déjean
Research engineer in statistics
Toulouse Mathematics Institute
sebastien.dejean@math.univ-toulouse.fr
www.math.univ-toulouse.fr/~sdejean



SCIENTIFIC INTERESTS

- x applied statistics
- x biostatistics
- x post-genomic data analysis
- x data intregation methods
- x data-mining

SELECTED PAPERS

(the complete list is available on my web page: www.math.univ-toulouse.fr/~sdejean)

METHODOLOGY

1/ I. González, **S. Déjean**, P.G.P. Martin, O. Gonçalves, P. Besse, A. Baccini (2008)
Highlighting Relationships Between Heterogeneous Biological Data Through Graphical Displays
Based On Regularized Canonical Correlation Analysis
Journal of Biological Systems, accepted

2/ I. González, **S. Déjean**, P. Martin, A. Baccini (2008)
CCA: An R Package to Extend Canonical Correlation Analysis
Journal of Statistical Software, vol. 23, issue 12

3/ **S. Déjean**, P. Martin, A. Baccini, P. Besse (2007)
Clustering time series gene expression data using smoothing spline derivatives
EURASIP Journal on Bioinformatics and Systems Biology, vol. 2007, article ID 70561, 10 pages

4/ A. Baccini, P. Besse, **S. Déjean**, P. Martin, C. Robert-Granié, Magali San Cristobal (2005)
Stratégies pour l'analyse statistique de données transcriptomiques
Journal de la Société Française De Statistique, 146(1-2), 5-44

APPLICATION

1/ E. Yergeau, S.A. Schoondermark-Stolk, E.L. Brodie, **S. Déjean**, T.Z. DeSantis, O. Gonçalves, Y.M. Piceno, G.L. Andersen and G.A. Kowalchuk (2008)
Environmental microarray analyses of Antarctic soil microbial communities
The International Society for Microbial Ecology Journal, 1-12

2/ D. Larrouy, P. Barbe, C. Valle, **S. Déjean**, V. Pelloux, C. Thalamas, J-P. Bastard, A. Le Bouil, B. Diquet, K. Clément, D. Langin, N. Viguerie (2008)
Gene expression profiling of human skeletal muscle in response to stabilized weight loss
The American Journal of Clinical Nutrition, 88(1), 125-132.

3/ S. Combes, I. González, **S. Déjean**, A. Baccini, N. Jehl, H. Juin, L. Cauquil, B. Gabinaud, F. Lebas, C. Larzul (2008)

Relationships between sensory and physicochemical measurements in meat of rabbit from three different breeding systems using canonical correlation analysis

Meat science, doi:10.1016/j.meatsci.2008.03.033

4/ P. Martin, H. Guillou, F. Lasserre, **S. Déjean**, A. Lan, J-M. Pascussi, M. San Cristobal, P. Legrand, P. Besse, T. Pineau (2007)

Novel aspects of PPARalpha-mediated regulation of lipid and xenobiotic metabolism revealed through a nutrigenomic study

Hepatology, 54(3), 767-777

ADMINISTRATION

- x **Coordinator of the Biostatistics Platform** inside Genopôle Toulouse Midi-Pyrénées (network of platforms in life science, www.genotoul.fr)
- x **Organizer** of the monthly seminar of the Biostatistics Platform
- x **Organization committee** of the Statistical Methods for Post-Genomic Data (SMPGD) annual workshop since 2006

TEACHING

- x **statistics** for biologists (students and senior scientists)
- x **statistical softwares** for under-graduate students in applied mathematics

SOFTWARE

Author and/or maintainer of R packages:

- x **CCA**: extend classical canonical correlation analysis.
- x **HAPim**: propose four methods for QTL detection.
- x **concor**: perform a kind of « SVD by blocks »

EDUCATION

1998-2002: Ph.D student at University of Toulouse and National Institute for Agronomic Research (INRA), Ph.D diploma obtained 07/2002

1998 : DEA diploma in Applied Mathematics, University of Toulouse

1997 : Master degree in « Industrial Mathematics: Scientific Computing and Statistics », University of Toulouse