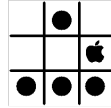


# CHRISTOPHE LALANNE

#psychometrics #biostatistics #biometrics #multivariatestatistics #machinelearning  
#clinicaltrials #statisticalcomputing #rstats #stata #tex #lisp & co.





## Office


Département de la Recherche Clinique  
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## Home

Not for web version.

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**Short Bio:** French citizen; born June, 1974 (42 yo.); one child (Pierre, 12 yo.);  user. FOAS member ([www.foostat.org](http://www.foostat.org)).

## Professional experience

- 2014–2016  
(2 yrs) **Research Engineer**  
*Paris Diderot University, and Département de la Recherche Clinique et du Développement, Saint Louis Hospital, Paris, France.*  
More or less similar work there.
- 2010–2014  
(4 yrs.) **Psychometrician/Biostatistician**  
*Département de la Recherche Clinique et du Développement, Saint Louis Hospital, and PSIGIAM group (INSERM U669) Paris, France.*  
Psychometric validation of *Health-related quality of life* measurement instruments in infectious diseases; development and assessment of *eHealth solutions*; *data mining and modelling* strategies in clinical research; teaching (psychometrics, biostatistics, statistical computing).
- 2009–2010  
(1 yr.) **Biostatistician**  
*CEA/DSV/I<sup>2</sup>BM/Neurospin, Saclay, France.*  
Multivariate analysis of clinical, neuroimaging and genetic data for the european IMAGEN consortium.
- 2008–2009  
(1 yr.) **Psychometrician**  
*Département de la Recherche Clinique et du Développement, Saint Louis Hospital, and PSIGIAM group (INSERM U669) Paris, France.*  
Development and validation of an Health-related quality of life questionnaire; biostatistical analysis for neuropsychological psychiatric studies and patient reported outcomes studies.
- 2006–2008  
(2 yrs.) **Psychometrician**  
*Centre international d'études pédagogiques, Sèvres, France.*  
Field-trial and analysis for educational testing in French; Coordination of international surveys.
- 2004–2006  
(2 yrs.) **Lecturer**  
*IUT, Université René Descartes (Paris 5), France.*  
Various lectures in Cognitive Science and Artificial Intelligence.
- 2001–2004  
(3 yrs.) **PhD student**  
*France Télécom R&D, Issy-les-Moulineaux, France.*  
Experimental design for multimodal HCI development (visuo-haptic devices).

## Teaching activities

*Current courses:*

1. Training in statistical computing using R and Stata (RITME, <http://ritme.com>)
2. Introduction to data mining and machine learning with R (ESME Sudria, <http://www.esme.fr>)

3. MOOC Introduction aux statistiques avec R (Univ. Paris Sud, Pr. B. Falissard)
4. Cours d'Informatique du CESAM : Initiation aux logiciels R et Stata (Univ. Pierre & Marie Curie, 25h)
5. Statistics for behavioral science (ENS, <http://sapience.dec.ens.fr/cogmaster/www/>)
6. Biostatistics (CentraleSupélec, <http://www.centralesupelec.fr/wordpress/>)
7. Psychometric methods in patient-reported outcomes studies (INSERM, <http://www.eespe.u-psud.fr>)

*Others (2002–2015):*

[2002–2009] Courses in *Applied statistics* (Master level, Université Pierre & Marie Curie, Université René Diderot, Université Nanterre, CNRS), and *Computer science* (1st year engineering school, ESTP), between 100 and 300h/yr.

[2011–2015] *Essais thérapeutiques* DCEM2 (Univ. Paris Diderot,  $2 \times 2$  hr.), *Introduction to health measurement* ( $4 \times 1$  hr.); *Introduction to R for biomedical research* ( $11 \times 2$  hr.); various lectures on statistical models in R, analysis of subjective measures, statistics applied to clinical trials (10 hr.).

Material available at <http://aliquote.org/cours/>.

## Education

- 2006 **Doctorat (PhD)** Cognitive Science  
**Université Pierre & Marie Curie (Paris 6)**, Paris, France.
- 2001 **DEA (MSc)** Mathematics, Applied Computer Science  
**Université René Descartes (Paris 5)**, Paris, France [partial validation].
- 2000 **DEA (MSc)** Cognitive Science  
**Université Pierre & Marie Curie (Paris 6)**, Paris, France.
- 1999 **Maîtrise (BSc)** Experimental Psychology and Neurosciences  
**Université Pierre & Marie Curie (Paris 6)**, Paris, France.
- 2005–2009 **Formal training** Statistics  
**Including:** *Applied Statistics* (CNAM, Paris), *Bioinformatics* (Université d'Orsay, Paris Sud), *Epidemiology and Biostatistics* (Université Pierre & Marie Curie, Orsay).
- 2016 **Continuing education** Data Science  
**Coursera Specialization including:** *Data Mining* (UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN, Paris), *Machine Learning* (University of Washington), *Data Science* (John Hopkins University), *Data Science at Scale* (University of Washington).

## Publications

### Books

1. **Lalanne, C.** et Mesbah, M. (2016) *Biostatistiques et traitement informatique des données de santé avec R*. ISTE Science Publishing.
2. **Lalanne, C.** et Mesbah, M. (2016) *Biostatistics and computer-based analysis of health data using R*. ISTE Science Publishing.
3. **Lalanne, C.** et Mesbah, M. (2016) *Biostatistiques et traitement informatique des données de santé avec Stata*. ISTE Science Publishing. (in press)
4. **Lalanne, C.** et Mesbah, M. (2016) *Biostatistics and computer-based analysis of health data using Stata*. ISTE Science Publishing.
5. **Lalanne, C.** *Working with data*. Leanpub

## Peer-reviewed articles

### Working papers

1. Camprecios, M., Duclos, J., **Lalanne, C.**, Maria, A.-S., Chabhandharian, C., EVHAN Group, and Godart, N. Contributing Factors to Expressed Emotion in Anorexia Nervosa. *Psychological Medicine*
2. Nazac, A., Defline, A., Lesavre, M., Vassilieff, M., Duracinsky, M., **Lalanne, C.**, Fernandez, C.. Randomized controlled trial comparing the efficacy of bipolar energy versus monopolar energy in endometrial ablation in women with menorrhagia.
3. Korb, D., **Lalanne, C.**, Pourcelot, A.-G., Duračinský, M., Fernandez, H., Teig, B., and Nazac, A. Performance of hysteroscopically targeted biopsies for the diagnosis of endometrial cancer.
4. Bourdier, L, **Lalanne, C.**, Romo, L., Morvan, Y., Kern, L., and Berthoz, S. French validation of the Emotional Appetite Questionnaire (EMAQ).
5. Maimaiti, R., Kejun, P., Wubili, M., Yuexin, Z., **Lalanne, C.**, Duračinský, M., Andersson, R. Low quality of life among people living with HIV in Xinjiang, West China. *AIDS Patient Care STDs*
6. **Lalanne, C.**, Berthoz, S., and Godart, N. Psychometric validation of a French version of the Eating Disorder Examination Questionnaire (v.5) in a sample of anorectic patients. (in prep.)

### Published papers

7. Armstrong, A.R., Herrmann, S.E., Chassany, O., **Lalanne, C.**, Da Silva, M.H., Galano, E., Carrieri, P.M., Estellon, V., Sogni, P., and Duračinský, M. (2016). The International development of PROQOL-HCV: An instrument to assess the health-related quality of life of patients treated for Hepatitis C virus. *BMC Infectious Disease*, 16(1): 443.
8. Vaivre-Douret, L., **Lalanne, C.**, and Golse, B. (2016). DCD, an umbrella term of motor dysfunctions which could include minor neurological dysfunctions such as mild spasticity: An observational study. *Frontiers in Psychology (Cognitive Science)*, 7, 502.
9. Onen, F., **Lalanne, C.**, Pak, V., Gooneratne, N., Falissard, B., and Onen, S.-H. (2016). A 3-item Instrument for Measuring Daytime Sleepiness: The Observation and Interview Based Diurnal Sleepiness Inventory (ODSI). *Journal of Clinical Sleep Medicine*, 12(4), 505-512.
10. **Lalanne, C.**, Chassany, O., Carrieri, P., Marcellin, F., Armstrong, A.R., Lert, F., Dray-Spira, R., Spire, B. Dray-Spira, R., and Duračinský, M. (2016). A reduced factor structure for the PROQOL-HIV questionnaire provided reliable indicators of health-related quality of life. *Journal of Clinical Epidemiology*, 72, 116-125.
11. Rizk, M., **Lalanne, C.**, Berthoz, S., Kern, L., and Godart, N. (2015) Problematic physical activity in Anorexia Nervosa: Testing potential risk factors against different definitions. *PLoS One*, 10(11): e0143352.
12. **Lalanne, C.**, Armstrong, A., Herrmann, S., Le Coeur, S., Chassany, O., and Duračinský, M. (2015). Relation between health-related quality of life and symptoms experience in HIV patients treated with highly-active antiretroviral therapy. *Quality of Life research*, 24, 1407-1418.
13. Courty, A., Godart, N., **Lalanne, C.**, and Berthoz, S. (2015). Alexithymia, a compounding factor for eating and social avoidance symptoms in Anorexia Nervosa. *Comprehensive Psychiatry*, 56, 217-228.
14. Pinel, P., **Lalanne, C.**, Bourgeron, T., Fauchereau, F., Poupon, C., Artiges, E., Le Bihan, D., Dehaene-Lambertz, G., and Dehaene, S. (2015). Genetic and Environmental Influences on the Visual Word Form and Fusiform Face Areas. *Cerebral Cortex*, 25(9), 2478-2493.
15. Squires, C., **Lalanne, C.**, Murday, N., Simoglou, V., and Vaivre-Douret, L. (2014). The influence of eating disorders on mothers' sensitivity and adaptation during feeding: a longitudinal observational study. *BMC Pregnancy and Childbirth*, 14, 274.
16. Duračinský, M., **Lalanne, C.**, Goujard, C., Herrmann, S., Cheung-Lung, C., Schwartz, Y., Armstrong, A.A., and Chassany, O. (2014). Validation of an electronic form of the PROQOL-HIV questionnaire to assess health-related quality of life in HIV patients. *Journal of Internet Medical research*, 16(4), e115.
17. Courty, A., Maria, A.S., **Lalanne, C.**, Ringuenet, D., Vindreau, C., Chevallier, C., Pouga, L., Pinabel, F., Philippe, A., Adrien, J.-L., Barry, C., and Berthoz, S. (2013). Levels of autistic traits in Anorexia Nervosa: A comparative psychometric study. *BMC Psychiatry*, 13, 222.
18. Bydlowski, S., **Lalanne, C.**, Golse, B., and Vaivre-Douret, L. (2013). The post-partum blues: A marker of the early new-born organisation? *Infant Mental Health Journal*, 34(6), 508-515.

19. Berthoz, S., **Lalanne, C.**, Crane, L., and Hill, E.H. (2013). Investigating emotional impairments in adults with autism spectrum disorders and the broader autism phenotype. *Psychiatry Research*, 208(3), 257-264.
20. Herrmann, S., McKinnon, E., Hyland, N., **Lalanne, C.**, Mallal, S., Nolan, D., Chassany, O., and Duračinský, M. (2013). Disease-related stigma and physical symptoms have a pervasive and prevailing impact on health-related quality of life in Australians with HIV infection. *Health and Quality of Life Outcomes*, 11, 56.
21. **Lalanne, C.**, Falissard, B., Golse, B., and Vaivre-Douret, L. (2012). Refining dyspraxia subtyping with multivariate statistical methods. *BMC Medical Research Methodology*, 12(1), 107.
22. Le Floch, E., Guillemot, V., Frouin, V., Pinel, P., **Lalanne, C.**, Trinchera, L., Tenenhaus, A., Moreno, A., Zilbovicius, M., Bourgeron, T., Dehaene, S., Thirion, B., Poline, J.-B., and Duchesnay, E. (2012). Significant correlation between a set of genetic polymorphisms and a functional brain network revealed by feature selection and sparse Partial Least Squares. *NeuroImage*, 63(1), 11–24.
23. Duračinský, M., **Lalanne, C.**, Le Coeur, S., Herrmann, S., Berzins, B., Armstrong, A.R., Lau, J.T.F., Fournier, I., Sow, S., and Chassany, O. (2012). Psychometric validation of the PROQOL-HIV questionnaire, a new health-related quality of life instrument specific to HIV disease. *Journal of Acquired Immune Deficiency Syndromes*, 59(5), 506–515.
24. Vaivre-Douret, L., **Lalanne, C.**, Cabrol, D., Ingster-Moati, I., Falissard, B., and Golse B. (2011). Identification de critères diagnostiques des sous-types de Troubles de l'Acquisition de la Coordination (TAC) ou dyspraxie développementale. *Neuropsychiatrie de l'Enfance et de l'Adolescence*, 59(8), 443–453.
25. Vaivre-Douret, L., **Lalanne, C.**, Mouchel, B., Ingster-Moati, I., Golse, B. and Falissard, B. (2011). Subtyping of developmental dyspraxia (DCD): Research on nature and etiology. *Developmental Neuropsychology*, 36(5), 614–643.
26. Vaivre-Douret, L., **Lalanne, C.**, Charlemaine, C., Cabrol, D., Goullou, K., Sebbane, O., Golse, B., and Falissard, B. (2010). Relationship between growth status at birth and motor and cognitive development in a French sample of gifted children. *European Review of Applied Psychology*, 60, 1–9.
27. Lorenceau, J. and **Lalanne, C.** (2008). Superposition catastrophe and form-motion binding. *Journal of Vision*, 8(8), 1–14.
28. **Lalanne, C.** and Lorenceau, J. (2006). Directional shifts in the barber pole 'illusion': Effects of spatial frequency, spatial adaptation and lateral masking. *Visual Neuroscience*, 23, 1–11.
29. **Lalanne, C.** and Lorenceau, J. (2004). Cross-modal integration for perception and action. *Journal of Physiology (Paris)*, 98, 265–279.
30. **Lalanne, C.**, Zamani, M., and Lorenceau, J. (2004). Effects of perceived visual coherence on visuo-manual coordination. In M. Heller & S. Ballesteros (Eds.), *Touch, Blindness and Neurosciences*, pp. 187–197. Madrid, Spain: UNED Press.

Other publications can be found at <http://aliquote.org/publications.html>. Open access textbooks are available on GitHub.

Past\* or current reviewer for *Journal of Statistical Software*, *Health Outcomes Research in Medicine*, *The Patient - Patient-Centered Outcomes Research*, *BMC Health Services Research*, *BMC Medical Research Methodology*, *Quality of Life Research*, *Methodology\**, *International Journal of Methods in Psychiatric Research*, *Psychological Reports*, *Journal of Internet Medical Research*, *Disability and Rehabilitation*, *AIDS Care*, *International Journal of STD & AIDS*, *Revue d'Epidémiologie et de Santé Publique\**, *ISPOR conference\**.

## Technical Skills

Working on Mac OS X and GNU Emacs with common *programming and scientific languages* (C, Python, Octave, Clojure, Common Lisp, sed/awk), *database query systems* (SQL, PostgreSQL, SQLite, Redis, MonetDB), various *statistical software* (R, Stata, Mplus, Weka, (Open)Mx, JAGS, GGobi, LispStat, SAS (Studio only)), *typesetting systems* (T<sub>E</sub>X, L<sup>A</sup>T<sub>E</sub>X, ConT<sub>E</sub>Xt, XML), *literate programming languages* (Noweb, Sweave, knitr, Statweave, Org babel), *version control systems* (Git, SVN, RCS), and many esoteric but useful and open-source software (e.g., json, csvkit, jq, Vowpal Wabbit, Orange, D3, Shiny).

More information about recent musings at <http://aliquote.org/memos> and <http://aliquote.org/articles>.

## Miscellanies

Reading; music; sports (Yoseikan Budo, Boxing); writings of applied statistical textbooks; Stack Exchange QAs (Moderator on <http://www.crossvalidated.com>).