



Frederic COMMO, PhD

Data Scientist – Oncology & Bioinformatics

Project Leader, Precision Cancer Medicine & Molecular Screening Programs



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[Frederic Commo](#)

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Work experience

2014 -Present Data Scientist at Gustave Roussy, Villejuif, France

Project Leader, Bioinformatics for Precision Medicine & Molecular Screening Programs

- Identifying molecular alterations matching with targeted therapies.
Deployment of data transfer/storage and analysis solutions for molecular screening programs.
- Developing sharable visualization tools to assist therapeutic decision-making.
[Interactive aCGH Viewer](#) an end-user server solution for visualising and interacting with genomic profiles.
[curveFitter](#), online application for curve fitting and drug response analysis (an extension of the nplr R package).
- Identifying new biomarkers and exceptional responders to treatments (ongoing research)
- **Publications:** [Ann Oncol 2015](#) (1st author), [Bioinformatics 2015](#) (1st author)
- **R package as author:** [rCGH](#) on Bioconductor (genomic profiling and visualization)

2012 - 2014 Data Scientist – Visiting Scientist at Sage Bionetworks, Seattle, WA

- Steering Committee & Tumour Board Committee, Precision Medicine Programs.
- Computational methods for Precision Cancer Medicine (microarrays & NGS).
- **Publications:** [J Clin Oncol. 2013](#), [Clin Cancer Res. 2013](#), [Mol Cancer Ther. 2013](#)
- **R package as author:** [nplr](#) on CRAN (Logistic regressions for curve fitting and drug response analysis)

2007 - 2012 Project leader at Gustave Roussy, Villejuif, France

- Department of Translational Research & Inserm U981 (Pr Fabrice André)
- Project management & data analysis, Precision Medicine Program [SAFIR01](#).
 - Microarray Gene Expression analyses & meta-analyses.

2004-2007 APHP non-active status to join Compiègne University of Technology.

1993-2004 Research Assistant. Dpt of Pathology, TENON Hospital, Paris.

1986-93 Laboratory technician. Dpt of Pathology, Jean VERDIER Hospital, Bondy, France.

Education

2015 PhD in Oncology & Bioinformatics, University Paris-Saclay

Genomic analysis within precision medicine: optimisations & visualization tools. Supervisor: Pr. Fabrice André

2007 Engineering Diploma & M. Sci., Compiègne University of Technology (U.T.C.)

Viva voce: Molecular portrait of ependymoma recurrences ([Plos One 2010](#) as co-1st author).

1985 Higher Technician Degree: Lab Technician School, Pitié-Salpêtrière, Paris.

Continued Education

- 2013**
- Machine Learning, Caltech, through edX (9 weeks)
 - Data Analysis, John Hopkins Univ. through Coursera (8 weeks)
 - Mathematical Biostatistics, John Hopkins Univ. through Coursera (7 weeks)

- 2012**
- Python programming, MIT, Cambridge, USA through edX (15 weeks)

1995-98 • Ecole Pratique des Hautes Etudes, University Paris-VI, Paris.

1991-92 • Molecular biology applied to diagnosis, University Paris-VI, Paris.

Skills

- Data Analysis** • Big Data, Statistical Inferences, Clustering, Data Modelling, Features Extraction.
- Programming Languages** • R, Python, SQL, html, CSS, javascript, Cloud Computing.
- French native, English.

Publications

- Collaboration to 48 [publications](#) in peer-reviewed international journals.
- Online end-user applications: [aCGHviewer](#), [curveFitter](#), [CellExplorer](#)

Teaching

- Statistical methods applied to genomics at *U.T.C. from 2008 to 2010*.
- Applied Statistics at *Ionis Engineering School, Paris, 2012*

Hobbies

Motorcycling, blues guitar, Diving (Advanced PADI certified).