Frederic COMMO, PhD
Data Scientist – Oncology & Bioinformatics

Project Leader, Precision Cancer Medicine & Molecular Screening Programs

France, Paris 75015   fredcommo@gmail.com   (+33) 6 84 60 33 08   [Frederic Commo](#)   fredcommo.github.io

Work experience

2014 -Present   **Data Scientist at Gustave Roussy, Villejuif, France**
Project Leader, Precision Cancer Medicine & Molecular Screening Programs

- Identifying molecular alterations matching with targeted therapies.
Deployment of data transfer/storage and analysis solutions for molecular screening programs at Gustave Roussy.

- 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   - R, Python, SQL, html, CSS, javascript, Cloud Computing.
Languages   - 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).