


Short-CV

| | |
|-----------------------------|---|
| First name | : Fredj |
| Family Name | : Tekaia |
| Title | : Invited Researcher (01-01-2017 -) |
| Previous Title | : Senior Research Engineer (01-01-1986 – 31-12-2016) |
| Affiliation | : Institut Pasteur Paris, France |
| Email Address | : tekaia@pasteur.fr |
| Website | : http://webext.pasteur.fr/tekaia/tekaia_publications.html |
| Field of interest/expertise | : Bioinformatics and <i>in silico</i> Genome Analysis |
| Key words | : Biocomputing; comparative genomics; genomes and genes evolution; phylogeny and evolutionary analysis methods; multivariate data analysis Methods – Education: Bioinformatics and Genome courses organisation. |



Brief Biography:

Work situation : Invited Researcher at Institut Pasteur Paris.

Previous Work situation: Senior Research Engineer (Cadre Supérieur Ingénierie de Recherche).

Education: Doctorate 3rd cycle in Mathematics & Statistics. Pierre and Marie Curie University (Paris VI), Paris, France. 1978.

Research Interests: Methodological aspects in Bioinformatics, *in silico* comparative genomics, genes and genomes evolutions.

Main Scientific works:

- Exploring genome data using Correspondence Analysis (Tekaiia, 2016a);
- Inferring Orthologs: Open Questions and Perspectives (Tekaiia, 2016b);
- Detection and Characterization of Megasatellites in genes of 21 fungal genomes (Tekaiia et al., 2013);
- Methods for the inference and classification of Orthologs and Paralogs in large-scale genome comparisons (Tekaiia & Yeramian, 2012; Tekaiia, 2016b);
- Characterisation of thermophile species and determination of evolutionary signatures from amino acid composition of proteomes (Tekaiia et al. 2002; Tekaiia & Yeramian 2006);
- «Genome trees» derived from shared conservation profiles, shared orthologs and conservation weights as deduced from large-scale proteome comparisons (Tekaiia et al. 1999; Tekaiia & Yeramian 2005);
- Contribution to analyses and comparisons of completely sequenced genomes (Cole et al. 1998; Tekaiia et al. 1999; Tekaiia et al. 2000; Dujon et al. 2004; Nierman et al. 2005; Tekaiia & Latgé 2005; Burkhard et al. 2005; d'Enfert et al. 2005; Stinear et al., 2007; Morales et al. 2013);
- *In silico* analysis of continued colonization of the human genome by mitochondrial DNA (Ricchetti et al. 2004);
- Ancestral gene duplication and conservation in completely sequenced organisms (Tekaiia & Dujon, 1999; Malpertuy et al. 2000);
- Contributions to phylogenetic analyses in viral studies involving mainly HIV and HTLV viruses (Ureta Vidal et al. 1994, Maheux et al. 1994, Mauclère et al. 1995, Lefevre et al. 1995, Riviere et al. 1995, Biglione et al. 2000. *AIDS Research & Human Retroviruses*. Tardiy-Panit et al. 1993, Ureta Vidal et al. 1994, Turppin et al. 1996, Testut et al. 1996, Mahieux et al. 1997. *Journal of Virology*. Gessain et al. *Proc. Natl. Acad. Sci.* 1995).
- Contributions to sequence analyses (Bougueleret et al. *Nuc Acids Res.*, 1988, Claverie et al. *Eur. J. Immunol.*, 1988);
- Transfer function for estimating paleoecological conditions from East African Diatoms. (Gasse & Tekaiia, *Hydrobiologia*, 1983);
- Analysis of ambulatory monitoring of aircrew heart rate variability (Fouillot et al. *In C. Dal Palu and A.C. Pessina, CLEUP Editore, Padova, Italy*, 1986);
- Heart rate variability of Airbus Aircrews (Fouillot et al. *Nato advanced science Institutes, Series D. 49:175-189.* 1989);
- The nearest neighbours: applications to workload and heart rate variability (Tekaiia et al. *In C. Dal Palu and A.C. Pessina, CLEUP Editore, Padova, Italy*, 1986);
- Methodology for heart rate histogram analysis by means of Correspondence Analysis (Tekaiia & Rieu, In E.D Stott, E.B. Raftery, D.L. Clement & S.L. Wright (ed.), *Academic Press, London*, 1982).

Organization of International Courses supported mainly by EMBO and Institut Pasteur Paris:

- Publication in PLoS Computational Biology about a course organization:

“Designing and Running a Bioinformatics and Genome Analyses course in Tunisia”. 2019:

<https://doi.org/10.1371/journal.pcbi.1006373>

- Publication in BioEssays:

“Enhancing Bioinformatics and Genomics course: Building Capacity and Skills via Lab Meeting Activities”. 2020:

<https://doi.org/10.1002/bies.202000134>

Bioinformatics and Comparative Genome Analysis (List of Programmes: http://webext.pasteur.fr/tekaia/BCGA_WPProgs.html)

- Fondazione Edmund Mach, San Michele All' Adige (TN), Italy, June 15 – 30, 2019:

https://webext.pasteur.fr/tekaia/BCGA2019/BCGA2019_Prog.html

- Institut Pasteur Tunis, Tunisia, September 10, December 15, 2018: <https://webext.pasteur.fr/tekaia/BCGAIPT2018.html>
- Institut Pasteur Tunis, Tunisia, September 18, December 15, 2017: <https://webext.pasteur.fr/tekaia/BCGAIPT2017.html>
- CERTH, Thessalonica, Greece, 2017: <http://webext.pasteur.fr/tekaia/BCGA2017.html>
- iBG-izmir, Izmir, Turkey, 2016: <http://webext.pasteur.fr/tekaia/BCGA2016.html>
- Hellenic Pasteur Institut, Athens, Greece, 2014: <http://webext.pasteur.fr/tekaia/BCGA2014.html>
- University of La Réunion, Saint Denis, France, 2013: <http://webext.pasteur.fr/tekaia/BCGA2013.html>
- Stazione Zoologica Anton Dohrn, Naples, Italy, 2012: <http://webext.pasteur.fr/tekaia/BCGA2012.html>
- Institut Pasteur Paris, 2010-2011: <http://webext.pasteur.fr/tekaia/BCGA2011.html>; <http://webext.pasteur.fr/tekaia/BCGA2010.html>
- Institut Pasteur Tunis, 2010: <http://webext.pasteur.fr/tekaia/EMBOGLC1014.html>
- HKU-Pasteur Research Centre, Hong Kong, 2009: http://webext.pasteur.fr/tekaia/BGA_courses.html
- Universidade Federal de Santa Catarina Florianópolis, Brazil, 2008: <http://webext.pasteur.fr/tekaia/ACBCGA.html>
- Institut Pasteur Tunis, Tunisia. 2007: <http://webext.pasteur.fr/tekaia/BCGA.html>
- Centre Biotechnology Sfax, Tunisia. 2005: <http://webext.pasteur.fr/tekaia/BGDA.html>

Teaching Bioinformatics and Genome Analysis in short courses:

- EMBO course in Saint Michele, Italy, 2019.
- Bioinformatics and Genome Analyses course, Institut Pasteur Tunis, Tunisia, 2017, 2018.
- EMBO course in CERTH, Thessaloniki, Greece, 2017.

- EMBO course in iBG-izmir, Izmir, Turkey, 2016.
- TEIN4: Next-Generation Sequencing Application Workshop. Perdana University, Selangor, Malaysia, 2014.
- EMBO course in the Hellenic Pasteur Institut, Athens, Greece, 2014; Institut Pasteur Tunis, 2014;
- University of Reunion Island, 2013;
- EMBO course, Naples, 2012;
- EMBO course, Paris, 2010, 2011;
- AGU, Bahrain: 2010, 2012, 2013, 2014. 2015, 2016, 2017, 2018;
- EMBO/Institut Pasteur course, Hong Kong, sar China, 2009;
- Institut Pasteur/EMBO/CNPq course, Florianopolis, Brazil, 2008;
- Institut Pasteur/EMBO/FEBS/CNRS course, Tunis, Tunisia, 2007;
- Ecole Nationale des Sciences de l'Information, Tunis,Tunisia, (2004-2006);
- Institut Pasteur/EMBO/IUBMB/ICGEB course, Sfax, Tunisia, 2005;
- DESS of Functional Genomic Engineering, U. Paris VII, (2000-2002);
- University of Ribeiro-Preto, Sao-Polo, Brasil, 2001 ;
- University of Sfax, Tunisia, (2001-2004) ;
- Institut Pasteur Paris (1991-2002);
- Ain Shams University of Cairo, Egypt,1997;
- Institut Pasteur Casablanca, Morocco,1995.

Publications:

Book:

Tekaia, F. and M. Bidel (1985)

LOGISTAT, Analyse Statistique des Données. 349 p. *SYBEX Editions Microinformatique; Paris.*

Number of Publications in International Peer-Reviewed Journals

: 112

Number of communications in international scientific meetings

: 100

Number of books

: 1 book + 12 participations to chapters of books.

ISI web of Knowledge (November 2020): Total citations: 21809; Citing Articles: 20557;

Average citation per publication = 256; h-index = 39; Most highly cited publication = 10110.

3 highly cited papers in their corresponding 10 years' period.

Google Scholar h-index=42; i10-index=66. <http://scholar.google.com/citations?user=LbBaU0sAAAAJ&hl=en&oi=ao>

Up to date list of publications: <http://webext.pasteur.fr/tekaia/tekaia.publications.html>

