Fábio Cassarotti Parronchi Navarro

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Education	• **Universidade de São Paulo** Ph.D. in sciences (biochemistry) (2011-current) Advisor: Anamaria A. Camargo, Ph.D. Co-advisor: Pedro A. F. Galante, Ph.D. • **Universidade Federal de São Carlos** Computer Engineering (2004-2009)
Honours and Awards	• Best poster award - X-meeting 2012 (Genomics). • Prêmio Viagem (2013/1) - Biochemistry Program. • Best poster award - X-meeting 2013 (Genomics). • AWS in Education Research Grant (2014). • EMBO Conference Travel Grant (2014).
Research Interest	• mRNA retroduplication on primates, human populations and cancer genomes. • Large-scale analysis of structural variations. • Pseudogene neofunctionalization.
Research Experience	• **Yale University** Post-doctoral associate at Mark Gerstein Lab (2014-Current) • **Hospital Sírio-Libanês** Bioinformatics Lab. (http://www.bioinfo.mochsl.org.br) (2011-2014) • **Ludwig Institute of Cancer Research** Compbio Lab. Technician (2009-2010) • **Embrapa - CNPDIA** Developer (2005-2007)

Teaching Experience	• **Universidade de São Paulo**
	  ○ Molecular Biology for Medicine (2012)
	    Teaching assistant
	  ○ Computational Molecular Biology for Chemistry (2011)
	    Teaching assistant

Computational Biology Experience

- **Developing computational pipelines**
  - Programming proficiency: Perl*, Python, C++ and Java
- **Cancer Genomics**
  - Single Nucleotide Variation analysis
  - Structural Variation analysis
- **Second Generation Sequencing**
  - SNP/SNV calling
  - Structural variation calling*
  - RNA-seq analysis
    - Differential expression and Pathway enrichment
  - 1KGP - DBvar
- **Comparative genomics**
  - Primate/Murine orthology
  - Repetitive elements
  - Purifying selection
- **Web development and Lab. Infrastructure**
  - Basic CakePHP and MySQL
  - Design and architecture of Multiple User Equipament cluster

Peer-reviewed Publications

- The PsychENCODE project.
  Psych ENCODE consortium, Nature Neuroscience, 2015.
  doi:10.1038/nn.4156

- A genome-wide landscape of retrocopied protein-coding genes in primates genomes.
  Navarro FCP, Galante PAF., Genome Biology and Evolution, 2015.
  doi:10.1093/gbe/evv142

- Gene Copy-Number Polymorphism Caused by Retrotransposition in Humans.
  Schrider DR*, **Navarro FCP***, et al. Plos Genetics, 2013.
  doi:10.1371/journal.pgen.1003242

- RCPedia: a database of retrocopied genes.
  Navarro FCP, Galante PAF, Bioinformatics, 2013.
  doi:10.1093/bioinformatics/btt104

- SPLOOCE: a new portal for the analysis of human splicing variants.
  Kroll JE, Galante PAF, Ohara DT, **Navarro FCP**, et al., RNA Biology, 2012
  doi: 10.4161/rna.22182

- Distinct patterns of somatic alterations in a lymphoblastoid and a tumor genome derived from the same individual.
  Galante PAF, Parmigiani RB, Zhao Q, Caballero OL, Souza JE, **Navarro FCP**, et al., Nucleic Acid Research, 2011.
  doi:10.1093/nar/gkr221

Work in progress

- Evolutionary and functional impact of a primate specific retrocopy into the Transferrin locus.
  Navarro FCP, Urlass AS, Smith VS, Camargo AA, Galante PAF, MacGillivray RTA.