LIST OF PUBLICATIONS
Francesca Antonacci

28. Chaisson MJP, Huddleston J, Dennis MY, Sudmant PH, Malig M, Hormozdiari F, **Antonacci F**, Surti U, Sandstrom R, Boitano M, Landolin JM, Stamatoyannopoulos JA, Hunkapiller MW, Korlach J, Eichler EE.
Resolving the complexity of the human genome using single-molecule sequencing.
Nature. 2014 Nov 10. doi: 10.1038/nature13907.
Impact Factor: 42.351

27. **Antonacci F**, Dennis MY, Huddleston J, Sudmant PH, Steinberg KM, Rosenfeld JA, Miroballo M, Graves TA, Vives L, Malig M, Denman L, Raja A, Stuart A, Tang J, Munson B, Shaffer LG, Amemiya CT, Wilson RK, Eichler EE.
Palindromic GOLGA8 core duplicons promote chromosome 15q13.3 microdeletion and evolutionary instability.
Nat Genet. 2014 Oct 19. doi: 10.1038/ng.3120.
Impact Factor: 29.648

26. Huddleston J, Ranade S, Malig M, **Antonacci F**, Chaisson M, Hon L, Sudmant PH, Graves TA, Alkan C, Dennis MY, Wilson RK, Turner SW, Korlach J, Eichler EE.
Reconstructing complex regions of genomes using long-read sequencing technology.
Genome Res. 2014 Apr;24(4):688-96. doi: 10.1101/gr.168450.113.
Impact Factor: 13.852

25. Giannuzzi G, Pazienza M, Huddleston J, **Antonacci F**, Malig M, Vives L, Eichler EE, Ventura M.
Hominoid fission of chromosome 14/15 and the role of segmental duplications.
Genome Res. 2013 Nov;23(11):1763-73. doi: 10.1101/gr.156240.113.
Impact Factor: 14.397

24. Nuttle X, Huddleston J, O'Roak BJ, **Antonacci F**, Fichera M, Romano C, Shendure J, Eichler EE.
Rapid and accurate large-scale genotyping of duplicated genes and discovery of interlocus gene conversions.
Nat Methods. 2013 Sep;10(9):903-9. doi: 10.1038/nmeth.2572.
Impact Factor: 23.565

23. Sudmant PH, Huddleston J, Catacchio CR, Malig M, Hillier LW, Baker C, Mohajeri K, Kondova I, Bontrop RE, Persengiev S, **Antonacci F**, Ventura M, Prado-Martinez J; Great Ape Genome Project, Marques-Bonet T, Eichler EE.
Evolution and diversity of copy number variation in the great ape lineage.
Genome Res. 2013 Sep;23(9):1373-82. doi: 10.1101/gr.158543.113.
Impact Factor: 14.397

22. Steinberg KM*, **Antonacci F***, Sudmant P, Kidd JM, Campbell CD, Vives L, Malig M, Scheinfeldt L, Beggs W, Ibrahim M, Lema G, Nyambo TB, Omar SA, Bodo JM, Froment A, Donnelly MP, Kidd KK, Tishkoff SA, Eichler EE.
*** These authors contributed equally to this work.**
Structural diversity and African origin of the 17q21.31 inversion polymorphism.
Nat Genet. 2012 Jul 1;44(8):872-80. doi: 10.1038/ng.2335.
Impact Factor: 35.532

21. Fieuw A, Kumps C, Schramm A, Pattyn F, Menten B, **Antonacci F**, Sudmant P, Schulte JH, Roy NV, Vergult S, Buckley PG, Paepe AD, Noguera R, Versteeg R, Stallings R, Eggert A, Vandesompele J, Preter KD, Speleman F.
Identification of a novel recurrent 1q42.2-1qter deletion in high risk MYCN single copy 11q deleted neuroblastomas.
Int J Cancer. 2012 Jun 1;130(11):2599-606. doi: 10.1002/ijc.26317.
Impact Factor: 5.444

20. Dennis MY*, Nuttle X*, Sudmant PH, **Antonacci F**, Graves TA, Nefedov M, Rosenfeld JA, Sajjadian S, Malig M, Kotkiewicz H, Curry CJ, Shafer S, Shaffer LG, de Jong PJ, Wilson RK, Eichler EE
* These authors contributed equally to this work.
Evolution of human-specific neural SRGAP2 genes by incomplete segmental duplication.
Cell. 2012 May 11;149(4):912-22. doi: 10.1016/j.cell.2012.03.033.
Impact Factor: 32.403

19. Chen YZ, Matsushita M, Robertson P, Rieder M, Girirajan S, **Antonacci F**, Lipe H, Eichler EE, Nickerson D, Bird T, Raskind W.
Autosomal Dominant Familial Dyskinesia and Facial Myokymia: Single Exome Sequencing Identifies a Mutation in Adenylate Cyclase 5.
Arch Neurol. 2012 May;69(5):630-5. doi: 10.1001/archneurol.2012.54.
Impact Factor: 7.584

18. Hurle B, Marques-Bonet T, **Antonacci F**, Hughes I, Ryan JF; NISC Comparative Sequencing Program, Eichler EE, Ornitz DM, Green ED.
Lineage-specific evolution of the vertebrate Otopetrin gene family revealed by comparative genomic analyses.
BMC Evol Biol. 2011 Jan 24;11:23. doi: 10.1186/1471-2148-11-23.
Impact Factor: 3.702

17. Alkan C*, Cardone MF*, Catacchio CR, **Antonacci F**, O'Brien SJ, Ryder OA, Purgato S, Zoli M, Della Valle G, Eichler EE, Ventura M.
* These authors contributed equally to this work.
Genome-wide characterization of centromeric satellites from multiple mammalian genomes.
Genome Res. 2011 Jan;21(1):137-45. doi: 10.1101/gr.111278.110.
Impact Factor: 13.588

16. Sudmant PH*, Kitzman JO*, **Antonacci F**, Alkan C, Malig M, Tsalenko A, Sampas N, Bruhn L, Shendure J; 1000 Genomes Project, Eichler EE.
* These authors contributed equally to this work.
Diversity of human copy number variation and multicopy genes.
Science. 2010 Oct 29;330(6004):641-6. doi: 10.1126/science.1197005.
Impact Factor: 29.747

15. Mefford HC, Shafer N, **Antonacci F**, Tsai JM, Park SS, Hing AV, Rieder MJ, Smyth MD, Speltz ML, Eichler EE, Cunningham ML.
Copy number variation analysis in single-suture craniosynostosis: multiple rare variants including RUNX2 duplication in two cousins with metopic craniosynostosis.
Am J Med Genet A. 2010 Sep;152A(9):2203-10. doi: 10.1002/ajmg.a.33557.
Impact Factor: 2.404

14. **Antonacci F**, Kidd JM, Marques-Bonet T, Teague B, Ventura M, Girirajan S, Alkan C, Campbell CD, Vives L, Malig M, Rosenfeld JA, Ballif BC, Shaffer LG, Graves TA, Wilson RK, Schwartz DC, Eichler EE.
A large and complex structural polymorphism at 16p12.1 underlies microdeletion disease risk.
Nat Genet. 2010 Sep;42(9):745-50. doi: 10.1038/ng.643.
Impact Factor: 34.284

13. Kidd JM, Sampas N, **Antonacci F**, Graves T, Fulton R, Hayden HS, Alkan C, Malig M, Ventura M, Giannuzzi G, Kallicki J, Anderson P, Tsalenko A, Yamada NA, Tsang P, Kaul R, Wilson RK, Bruhn L, Eichler EE.
Characterization of missing human genome sequences and copy-number polymorphic insertions.
Nat Methods. 2010 May;7(5):365-71. doi: 10.1038/nmeth.2572.
Impact Factor: 16.874

12. Girirajan S*, Rosenfeld JA*, Cooper GM, **Antonacci F**, Siswara P, Itsara A, Vives L, Walsh T, McCarthy SE, Baker C, Mefford HC, Kidd JM, Browning SR, Browning BL, Dickel DE, Levy DL, Ballif BC, Platky K, Farber DM, Gowans GC, Wetherbee JJ, Asamoah A, Weaver DD, Mark PR, Dickerson J, Garg BP, Ellingwood SA, Smith R, Banks VC, Smith W, McDonald MT, Hoo JJ, French BN, Hudson C, Johnson JP, Ozmore JR, Moeschler JB, Surti U, Escobar LF, El-Khechen D, Gorski JL, Kussmann J, Salbert B, Lacassie Y, Biser A, McDonald-McGinn DM, Zackai EH, Deardorff MA, Shaikh TH, Haan E, Friend KL, Fichera M, Romano C, Gécz J, DeLisi LE, Sebat J, King MC, Shaffer LG, Eichler EE.
* These authors contributed equally to this work.
A recurrent 16p12.1 microdeletion supports a two-hit model for severe developmental delay.
Nat Genet. 2010 Mar;42(3):203-9. doi: 10.1038/ng.534.
Impact Factor: 34.284

11. Alkan C, Kidd JM, Marques-Bonet T, Aksay G, **Antonacci F**, Hormozdiari F, Kitzman JO, Baker C, Malig M, Mutlu O, Sahinalp SC, Gibbs RA, Eichler EE.
Personalized copy number and segmental duplication maps using next-generation sequencing.
Nat Genet. 2009 Oct;41(10):1061-7. doi: 10.1038/ng.437.
Impact Factor: 30.259
Numero di Citazioni: 241

10. Cellamare A*, Catacchio CR*, Alkan C, Giannuzzi G, **Antonacci F**, Cardone MF, Della Valle G, Malig M, Rocchi M, Eichler EE, Ventura M.
* These authors contributed equally to this work.
New insights into centromere organization and evolution from the white-cheeked gibbon and marmoset.
Mol Biol Evol. 2009 Aug;26(8):1889-900. doi: 10.1093/molbev/msp101.
Impact Factor: 7.280

9. **Antonacci F**, Kidd JM, Marques-Bonet T, Ventura M, Siswara P, Jiang Z, Eichler EE.
Characterization of six human disease-associated inversion polymorphisms.
Hum Mol Genet. 2009 Jul 15;18(14):2555-66. doi: 10.1093/hmg/ddp187.
Impact Factor: 7.249

8. Smith JJ, **Antonacci F**, Eichler EE, Amemiya CT.
Programmed loss of millions of base pairs from a vertebrate genome.
Proc Natl Acad Sci U S A. 2009 Jul 7;106(27):11212-7. doi: 10.1073/pnas.0902358106.
Impact Factor: 9.380

7. Bekpen C, Marques-Bonet T, Alkan C, **Antonacci F**, Leogrande MB, Ventura M, Kidd JM, Siswara P, Howard JC, Eichler EE.
Death and resurrection of the human IRGM gene.
PLoS Genet. 2009 Mar;5(3):e1000403. doi: 10.1371/journal.pgen.1000403.
Impact Factor: 8.883

6. Buysse K*, **Antonacci F***, Callewaert B, Loeys B, Fränkel U, Siu V, Mortier G, Speleman F, Menten B.
*** These authors contributed equally to this work.**
Unusual 8p inverted duplication deletion with telomere capture from 8q.
Eur J Med Genet. 2009 Jan-Feb;52(1):31-6. doi: 10.1016/j.ejmg.2008.10.007.
Impact Factor: 1.782

5. Buysse K, Crepel A, Menten B, Pattyn F, **Antonacci F**, Veltman JA, Larsen LA, Tümer Z, de Klein A, van de Laar I, Devriendt K, Mortier G, Speleman F.
Mapping of 5q35 chromosomal rearrangements within a genomically unstable region.
J Med Genet. 2008 Oct;45(10):672-8. doi: 10.1136/jmg.2008.058883.
Impact Factor: 5.535

4. Zody MC*, Jiang Z*, Fung HC, **Antonacci F**, Hillier LW, Cardone MF, Graves TA, Kidd JM, Cheng Z, Abouelleil A, Chen L, Wallis J, Glasscock J, Wilson RK, Reily AD, Duckworth J, Ventura M, Hardy J, Warren WC, Eichler EE.
* These authors contributed equally to this work.
Evolutionary toggling of the MAPT 17q21.31 inversion region.
Nat Genet. 2008 Sep;40(9):1076-83. doi: 10.1038/ng.193.
Impact Factor: 25.556

3. Kidd JM, Cooper GM, Donahue WF, Hayden HS, Sampas N, Graves T, Hansen N, Teague B, Alkan C, **Antonacci F**, Haugen E, Zerr T, Yamada NA, Tsang P, Newman TL, Tüzün E, Cheng Z, Ebling HM, Tusneem N, David R, Gillett W, Phelps KA, Weaver M, Saranga D, Brand A, Tao W, Gustafson E, McKernan K, Chen L, Malig M, Smith JD, Korn JM, McCarroll SA, Altshuler DA, Peiffer DA, Dorschner M, Stamatoyannopoulos J, Schwartz D, Nickerson DA, Mullikin JC, Wilson RK, Bruhn L, Olson MV, Kaul R, Smith DR, Eichler EE.
Mapping and sequencing of structural variation from eight human genomes.
Nature. 2008 May 1;453(7191):56-64. doi: 10.1038/nature06862.
Impact Factor: 28.751

2. Vandesompele J, Michels E, De Preter K, Menten B, Schramm A, Eggert A, Ambros PF, Combaret V, Francotte N, **Antonacci F**, De Paepe A, Laureys G, Speleman F, Van Roy N.
Identification of 2 putative critical segments of 17q gain in neuroblastoma through integrative genomics.
Int J Cancer. 2008 Mar 1;122(5):1177-82. doi: 10.1002/ijc.26317.
Impact Factor: 4.555

1. Ventura M*, **Antonacci F***, Cardone MF, Stanyon R, D'Addabbo P, Cellamare A, Sprague LJ, Eichler EE, Archidiacono N, Rocchi M.
   *** These authors contributed equally to this work.**
   Evolutionary formation of new centromeres in macaque.
   Science. 2007 Apr 13;316(5822):243-6. doi: 10.1126/science.1197005.
   Impact Factor: 30.028