

Publication 2010-2015

- 1: Carrara M, Lum J, Cordero F, Beccuti M, Poidinger M, Donatelli S, Calogero R, Zolezzi F. Alternative splicing detection workflow needs a careful combination of sample prep and bioinformatics analysis. *BMC Bioinformatics*. 2015;16 Suppl 9:S2. doi: 10.1186/1471-2105-16-S9-S2. Epub 2015 Jun 1. PubMed PMID: 26050971.
- 2: Fornari C, Balbo G, Halawani SM, Ba-Rukab O, Ahmad A, Calogero RA, Cordero F, Beccuti M. A versatile mathematical work-flow to explore how Cancer Stem Cell fate influences tumor progression. *BMC Syst Biol*. 2015;9 Suppl 3:S1. doi:10.1186/1752-0509-9-S3-S1. Epub 2015 Jun 1. PubMed PMID: 26050594.
- 3: D'Antonio M, D'Onorio De Meo P, Pallocca M, Picardi E, D'Erchia AM, Calogero RA, Castrignano T, Pesole G. RAP: RNA-Seq Analysis Pipeline, a new cloud-based NGS web application. *BMC Genomics*. 2015;16:S3. doi: 10.1186/1471-2164-16-S6-S3. Epub 2015 Jun 1. PubMed PMID: 26046471.
- 4: Menale C, Piccolo MT, Cirillo G, Calogero RA, Papparella A, Mita L, Giudice EM, Diano N, Crispi S, Mita DG. Bisphenol A effects on gene expression in adipocytes from children: association with metabolic disorders. *J Mol Endocrinol*. 2015 Jun;54(3):289-303. doi: 10.1530/JME-14-0282. Epub 2015 Apr 15. PubMed PMID: 25878060.
- 5: Calogero RA, Zolezzi F. Quantifying entire transcriptomes by aligned RNA-seq data. *Methods Mol Biol*. 2015;1269:163-72. doi: 10.1007/978-1-4939-2291-8_10. PubMed PMID: 25577378.
- 6: Beccuti M, Carrara M, Cordero F, Lazzarato F, Donatelli S, Nadalin F, Policriti A, Calogero RA. Chimera: a Bioconductor package for secondary analysis of fusion products. *Bioinformatics*. 2014 Dec 15;30(24):3556-7. doi: 10.1093/bioinformatics/btu662. Epub 2014 Oct 6. PubMed PMID: 25286921; PubMed Central PMCID: PMC4253834.
- 7: Popovic R, Martinez-Garcia E, Giannopoulou EG, Zhang Q, Zhang Q, Ezponda T, Shah MY, Zheng Y, Will CM, Small EC, Hua Y, Bulic M, Jiang Y, Carrara M, Calogero RA, Kath WL, Kelleher NL, Wang JP, Elemento O, Licht JD. Histone methyltransferase MMSET/NSD2 alters EZH2 binding and reprograms the myeloma epigenome through global and focal changes in H3K36 and H3K27 methylation. *PLoS Genet*. 2014 Sep 4;10(9):e1004566. doi: 10.1371/journal.pgen.1004566. eCollection 2014 Sep. PubMed PMID: 25188243; PubMed Central PMCID: PMC4154646.
- 8: Fornari C, Beccuti M, Lanzardo S, Conti L, Balbo G, Cavallo F, Calogero RA, Cordero F. A mathematical-biological joint effort to investigate the tumor-initiating ability of Cancer Stem Cells. *PLoS One*. 2014 Sep 3;9(9):e106193. doi: 10.1371/journal.pone.0106193. eCollection 2014. PubMed PMID: 25184361; PubMed Central PMCID: PMC4153566.
- 9: Pazienna V, Pomara C, Cappello F, Calogero R, Carrara M, Mazzoccoli G, Vinciguerra M. The TRPA1 channel is a cardiac target of mIGF-1/SIRT1 signaling. *Am J Physiol Heart Circ Physiol*. 2014 Oct 1;307(7):H939-44. doi: 10.1152/ajpheart.00150.2014. Epub 2014 Aug 8. PubMed PMID: 25108014.
- 10: Tremblay AM, Missiaglia E, Galli GG, Hettmer S, Urcia R, Carrara M, Judson RN, Thway K, Nadal G, Selfe JL, Murray G, Calogero RA, De Bari C, Zammit PS, Delorenzi M, Wagers AJ, Shipley J, Wackerhage H, Camargo FD. The Hippo transducer YAP1 transforms activated satellite cells and is a potent effector of embryonal rhabdomyosarcoma formation. *Cancer Cell*. 2014 Aug 11;26(2):273-87. doi: 10.1016/j.ccr.2014.05.029. Epub 2014 Jul 31. PubMed PMID: 25087979.

- 11: Riccardo F, Arigoni M, Buson G, Zago E, Iezzi M, Longo D, Carrara M, Fiore A, Nuzzo S, Bicciato S, Nanni P, Landuzzi L, Cavallo F, Calogero R, Quaglino E. Characterization of a genetic mouse model of lung cancer: a promise to identify Non-Small Cell Lung Cancer therapeutic targets and biomarkers. *BMC Genomics*. 2014;15 Suppl 3:S1. doi: 10.1186/1471-2164-15-S3-S1. Epub 2014 May 6. PubMed PMID: 25077564; PubMed Central PMCID: PMC4083401.
- 12: Kaur S, Kroczyńska B, Sharma B, Sassano A, Arslan AD, Majchrzak-Kita B, Stein BL, McMahon B, Altman JK, Su B, Calogero RA, Fish EN, Plataniás LC. Critical roles for Rictor/Sin1 complexes in interferon-dependent gene transcription and generation of antiproliferative responses. *J Biol Chem*. 2014 Mar 7;289(10):6581-91. doi: 10.1074/jbc.M113.537852. Epub 2014 Jan 27. PubMed PMID: 24469448; PubMed Central PMCID: PMC3945321.
- 13: Spadaro M, Montone M, Arigoni M, Cantarella D, Forni G, Pericle F, Pascolo S, Calogero RA, Cavallo F. Recombinant human lactoferrin induces human and mouse dendritic cell maturation via Toll-like receptors 2 and 4. *FASEB J*. 2014 Jan;28(1):416-29. doi: 10.1096/fj.13-229591. Epub 2013 Oct 2. PubMed PMID: 24088817.
- 14: Galli GG, Carrara M, Francavilla C, de Lichtenberg KH, Olsen JV, Calogero RA, Lund AH. Genomic and proteomic analyses of Prdm5 reveal interactions with insulator binding proteins in embryonic stem cells. *Mol Cell Biol*. 2013 Nov;33(22):4504-16. doi: 10.1128/MCB.00545-13. Epub 2013 Sep 16. PubMed PMID: 24043305; PubMed Central PMCID: PMC3838183.
- 15: Cardillo I, Spugnini EP, Galluzzo P, Contestabile M, Dell'Anna ML, Picardo M, Crispi S, Calogero RA, Piccolo MT, Arigoni M, Cantarella D, Boccellino M, Quagliuolo L, Ferretti G, Carlini P, Felici A, Boccardo F, Cognetti F, Baldi A. Functional and pharmacodynamic evaluation of metronomic cyclophosphamide and docetaxel regimen in castration-resistant prostate cancer. *Future Oncol*. 2013 Sep;9(9):1375-88. doi: 10.2217/fon.13.99. PubMed PMID: 23980684.
- 16: Conti L, Lanzardo S, Arigoni M, Antonazzo R, Radaelli E, Cantarella D, Calogero RA, Cavallo F. The noninflammatory role of high mobility group box 1/Toll-like receptor 2 axis in the self-renewal of mammary cancer stem cells. *FASEB J*. 2013 Dec;27(12):4731-44. doi: 10.1096/fj.13-230201. Epub 2013 Aug 22. PubMed PMID: 23970797.
- 17: Colasante G, Simonet JC, Calogero R, Crispi S, Sessa A, Cho G, Golden JA, Broccoli V. ARX regulates cortical intermediate progenitor cell expansion and upper layer neuron formation through repression of Cdkn1c. *Cereb Cortex*. 2015 Feb;25(2):322-35. doi: 10.1093/cercor/bht222. Epub 2013 Aug 22. PubMed PMID: 23968833; PubMed Central PMCID: PMC4351425.
- 18: Galli GG, Multhaup HA, Carrara M, de Lichtenberg KH, Christensen IB, Linnemann D, Santoni-Rugiu E, Calogero RA, Lund AH. Prdm5 suppresses Apc(Min)-driven intestinal adenomas and regulates monoacylglycerol lipase expression. *Oncogene*. 2014 Jun 19;33(25):3342-50. doi: 10.1038/onc.2013.283. Epub 2013 Jul 22. PubMed PMID: 23873026.
- 19: Carrara M, Beccuti M, Cavallo F, Donatelli S, Lazzarato F, Cordero F, Calogero RA. State of art fusion-finder algorithms are suitable to detect transcription-induced chimeras in normal tissues? *BMC Bioinformatics*. 2013;14 Suppl 7:S2. doi: 10.1186/1471-2105-14-S7-S2. Epub 2013 Apr 22. PubMed PMID: 23815381; PubMed Central PMCID: PMC3633050.
- 20: Cordero F, Beccuti M, Fornari C, Lanzardo S, Conti L, Cavallo F, Balbo G, Calogero R. Multi-level model for the investigation of oncoantigen-driven vaccination effect. *BMC Bioinformatics*. 2013;14 Suppl 6:S11. doi: 10.1186/1471-

2105-14-S6-S11. Epub 2013 Apr 17. PubMed PMID: 23734974; PubMed Central PMCID: PMC3633011.

21: Chang HT, Calogero RA, Draghici S, Ray O, Pai TW. Intelligent informatics in biomedicine. *Biomed Res Int.* 2013;2013:185839. doi: 10.1155/2013/185839. Epub 2013 Apr 22. PubMed PMID: 23710437; PubMed Central PMCID: PMC3654645.

22: Arigoni M, Barutello G, Riccardo F, Ercole E, Cantarella D, Orso F, Conti L, Lanzardo S, Taverna D, Merighi I, Calogero RA, Cavallo F, Quaglino E. miR-135b coordinates progression of ErbB2-driven mammary carcinomas through suppression of MID1 and MTCH2. *Am J Pathol.* 2013 Jun;182(6):2058-70. doi: 10.1016/j.ajpath.2013.02.046. Epub 2013 Apr 23. PubMed PMID: 23623609.

23: Carrara M, Beccuti M, Lazzarato F, Cavallo F, Cordero F, Donatelli S, Calogero RA. State-of-the-art fusion-finder algorithms sensitivity and specificity. *Biomed Res Int.* 2013;2013:340620. doi: 10.1155/2013/340620. Epub 2013 Feb 17. PubMed PMID: 23555082; PubMed Central PMCID: PMC3595110.

24: Crispi S, Piccolo MT, D'Avino A, Donizetti A, Viceconte R, Spyrou M, Calogero RA, Baldi A, Signorile PG. Transcriptional profiling of endometriosis tissues identifies genes related to organogenesis defects. *J Cell Physiol.* 2013 Sep;228(9):1927-34. doi: 10.1002/jcp.24358. PubMed PMID: 23460397.

25: Vivo M, Ranieri M, Sansone F, Santoriello C, Calogero RA, Calabrese V, Pollice A, La Mantia G. Mimicking p14ARF phosphorylation influences its ability to restrain cell proliferation. *PLoS One.* 2013;8(1):e53631. doi: 10.1371/journal.pone.0053631. Epub 2013 Jan 7. PubMed PMID: 23308265; PubMed Central PMCID: PMC3538741.

26: Bolasco G, Calogero R, Carrara M, Banchaabouchi MA, Bilbao D, Mazzoccoli G, Vinciguerra M. Cardioprotective mIGF-1/SIRT1 signaling induces hypertension, leukocytosis and fear response in mice. *Aging (Albany NY).* 2012 Jun;4(6):402-16. PubMed PMID: 22691943; PubMed Central PMCID: PMC3409677.

27: Cordero F, Beccuti M, Donatelli S, Calogero RA. Large disclosing the nature of computational tools for the analysis of next generation sequencing data. *Curr Top Med Chem.* 2012;12(12):1320-30. Review. PubMed PMID: 22690679.

28: Galli GG, Honnens de Lichtenberg K, Carrara M, Hans W, Wuelling M, Mentz B, Multhaup HA, Fog CK, Jensen KT, Rappaport J, Vortkamp A, Coulton L, Fuchs H, Gailus-Durner V, Hrabfó de Angelis M, Calogero RA, Couchman JR, Lund AH. Prdm5 regulates collagen gene transcription by association with RNA polymerase II in developing bone. *PLoS Genet.* 2012;8(5):e1002711. doi: 10.1371/journal.pgen.1002711. Epub 2012 May 10. PubMed PMID: 22589746; PubMed Central PMCID: PMC3349747.

29: Lorenzato A, Martino C, Dani N, Oligschlager Y, Ferrero AM, Biglia N, Calogero R, Olivero M, Di Renzo MF. The cellular apoptosis susceptibility CAS/CSE1L gene protects ovarian cancer cells from death by suppressing RASSF1C. *FASEB J.* 2012 Jun;26(6):2446-56. doi: 10.1096/fj.11-195982. Epub 2012 Mar 2. PubMed PMID: 22389439.

30: Dani N, Olivero M, Mareschi K, van Duist MM, Miretti S, Cuvertino S, Patane S, Calogero R, Ferracini R, Scotlandi K, Fagioli F, Di Renzo MF. The MET oncogene transforms human primary bone-derived cells into osteosarcomas by targeting committed osteo-progenitors. *J Bone Miner Res.* 2012 Jun;27(6):1322-34. doi: 10.1002/jbmr.1578. PubMed PMID: 22367914.

31: Cordero F, Beccuti M, Arigoni M, Donatelli S, Calogero RA. Optimizing a massive parallel sequencing workflow for quantitative miRNA expression analysis.

PLOS One. 2012;7(2):e31630. doi: 10.1371/journal.pone.0031630. Epub 2012 Feb 20. PubMed PMID: 22363693; PubMed Central PMCID: PMC3282730.

32: Salvatori L, Caporuscio F, Verdina A, Starace G, Crispi S, Nicotra MR, Russo A, Calogero RA, Morgante E, Natali PG, Russo MA, Petrangeli E. Cell-to-cell signaling influences the fate of prostate cancer stem cells and their potential to generate more aggressive tumors. PLoS One. 2012;7(2):e31467. doi: 10.1371/journal.pone.0031467. Epub 2012 Feb 6. PubMed PMID: 22328933; PubMed Central PMCID: PMC3273473.

33: Bolli E, Quaglino E, Arigoni M, Lollini PL, Calogero R, Forni G, Cavallo F. Oncoantigens for an immune prevention of cancer. Am J Cancer Res. 2011;1(2):255-264. Epub 2010 Dec 20. PubMed PMID: 21969087; PubMed Central PMCID: PMC3180047.

34: Bosotti R, Carpinelli P, Healy S, Locatelli G, Cappella P, Lanfrancone L, Calogero R, Moll J, Isacchi A. Transcriptional analysis of the Aurora inhibitor Danusertib leading to biomarker identification in TP53 wild type cells. Gene. 2012 Feb 25;494(2):202-8. doi: 10.1016/j.gene.2011.08.014. Epub 2011 Sep 2. PubMed PMID: 21914463.

35: Baldi A, Piccolo MT, Boccellino MR, Donizetti A, Cardillo I, La Porta R, Quagliuolo L, Spugnini EP, Cordero F, Citro G, Menegozzo M, Calogero RA, Crispi S. Apoptosis induced by piroxicam plus cisplatin combined treatment is triggered by p21 in mesothelioma. PLoS One. 2011;6(8):e23569. doi: 10.1371/journal.pone.0023569. Epub 2011 Aug 17. PubMed PMID: 21858171; PubMed Central PMCID: PMC3157425.

36: Riganti C, Pinto H, Bolli E, Belisario DC, Calogero RA, Bosia A, Cavallo F. Atorvastatin modulates anti-proliferative and pro-proliferative signals in Her2/neu-positive mammary cancer. Biochem Pharmacol. 2011 Nov 1;82(9):1079-89. doi: 10.1016/j.bcp.2011.07.079. Epub 2011 Jul 23. PubMed PMID: 21803026.

37: Giribaldi G, Prato M, Ulliers D, Gallo V, Schwarzer E, Akide-Ndunge OB, Valente E, Saviozzi S, Calogero RA, Arese P. Involvement of inflammatory chemokines in survival of human monocytes fed with malarial pigment. Infect Immun. 2010 Nov;78(11):4912-21. doi: 10.1128/IAI.00455-10. Epub 2010 Aug 23. PubMed PMID: 20732999; PubMed Central PMCID: PMC2976350.

38: Berkofsky-Fessler W, Buzzai M, Kim MK, Fruchtman S, Najfeld V, Min DJ, Costa FF, Bischof JM, Soares MB, McConnell MJ, Zhang W, Levine R, Gilliland DG, Calogero R, Licht JD. Transcriptional profiling of polycythemia vera identifies gene expression patterns both dependent and independent from the action of JAK2V617F. Clin Cancer Res. 2010 Sep 1;16(17):4339-52. doi: 10.1158/1078-0432.CCR-10-1092. Epub 2010 Jul 2. PubMed PMID: 20601445; PubMed Central PMCID: PMC2947624.

39: Locatelli G, Bosotti R, Ciomei M, Brasca MG, Calogero R, Mercurio C, Fiorentini F, Bertolotti M, Scacheri E, Scaburri A, Galvani A, Pesenti E, De Baere T, Soria JC, Lazar V, Isacchi A. Transcriptional analysis of an E2F gene signature as a biomarker of activity of the cyclin-dependent kinase inhibitor PHA-793887 in tumor and skin biopsies from a phase I clinical study. Mol Cancer Ther. 2010 May;9(5):1265-73. doi: 10.1158/1535-7163.MCT-09-1163. Epub 2010 Apr 27. PubMed PMID: 20423997.

40: Coco M, Alagona G, Rapisarda G, Costanzo E, Calogero RA, Perciavalle V, Perciavalle V. Elevated blood lactate is associated with increased motor cortex excitability. Somatosens Mot Res. 2010;27(1):1-8. doi: 10.3109/08990220903471765. PubMed PMID: 20141404.

41: Gilli F, Lindberg RL, Valentino P, Marnetto F, Malucchi S, Sala A, Capobianco M, di Sazio A, Sperli F, Kappos L, Calogero RA, Bertolotto A. Learning from nature: pregnancy changes the expression of inflammation-related genes in patients with multiple sclerosis. *PLoS One*. 2010 Jan 29;5(1):e8962. doi: 10.1371/journal.pone.0008962. PubMed PMID: 20126412; PubMed Central PMCID: PMC2813302.