ALLEGATO A

UNIVERSITÀ DEGLI STUDI DI MILANO
Procedura di selezione per la chiamata a professore di II fascia da ricoprire ai sensi dell'art. 18, commi 1 e 4, della Legge n. 240/2010 per il settore concorsuale 05/E2 – BIOLOGIA MOLECOLARE,
(settore scientifico-disciplinare BIO/11 – BIOLOGIA MOLECOLARE
presso il Dipartimento di BIOSCIENZE,
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Francesco Nicassio
CURRICULUM VITAE

INFORMAZIONI PERSONALI

COGNOME	**NICASSIO**
NOME	**FRANCESCO**
DATA DI NASCITA	21/06/1976

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Interessi Scientifici e Ricerca

Dal 2012 sono a capo del gruppo "Noncoding Genome" presso il Center of Genomic Science (CGS-IIT@SEMM) di Milano, uno degli 11 centri di ricerca dell'Istituto Italiano di Tecnologia (IIT). Al momento il "Noncoding Genome" lab è composto da 9 persone (6 post-doc, 2 dottorandi, 1 ricercatore). Dal 2017 sono anche coordinatore del centro, supervisionando, dirigendo e gestendo le attività scientifiche e le infrastrutture del Centro, che comprende 4 gruppi di ricerca e 32 persone in totale.

La missione del Centro è acquisire, sviluppare e applicare le tecnologie genomiche per una migliore comprensione dei processi biologici e delle malattie, con particolare riferimento al cancro e alla biologia del RNA. Il centro beneficia anche degli stretti legami con l'Istituto europeo di oncologia (IEO-ospedale, Milano), uno dei più grandi ospedali oncologici, che ospita i nostri spazi di laboratorio e fornisce infrastrutture complementari e accesso a dati clinici e campioni biologici per studi relativi al cancro.

I miei interessi scientifici sono incentrati sull'applicazione di approcci genomici allo studio della dinamica degli RNA non codificanti (microRNA e long noncoding RNA) e sul controllo dell'espressione genica e del comportamento cellulare. L'attività di ricerca si basa sull'integrazione di modelli sperimentali con metodologie computazionali, evidenziando la regolazione reciproca di RNA codificanti e non codificanti. Negli anni ho acquisito una vasta esperienza nell'uso di approcci sperimentali *high-throughput* e -omici, tra cui il sequenziamento di seconda generazione (Illumina) di RNA (totale, polyA e *strand-specific*), di small RNAs (inclusi i microRNA) e, più recentemente, il sequenziamento a singola cellula (RNA e ATAC) tramite DROP-seq (10X Genomics) ed il sequenziamento di terza generazione (*direct RNA sequencing*) tramite Nanopore.

Ho maturato anche una lunga esperienza nei meccanismi che controllano la plasticità trascrizionale e nella biologia dei microRNA. In particolare i miei lavori hanno contribuito a i) evidenziare il meccanismo d'azione combinato di microRNA co-espressi, un meccanismo che fino a quel momento era solo stato ipotizzato da analisi *in silico* [Marzi et al. J. Cell Biol 2012]; ii) sviluppare uno tra i primi applicativi computazionali che permettono di esplorare le modifiche post-trascrizionali dei microRNA a partire dai dati di sequenziamento NGS e nei *dataset* tumorali [**Isomirage**, Muller et al. Front. Bioeng Biotechnol. 2014]; iii) svelare il ruolo dei microRNA come marker tumorali nel siero/plasma [Bianchi e Nicassio EMBO Mol Med. 2011; Montani, Marzi et al JNCI 2015; Marzi et al. Clin. Chem 2015]; chiarire alcuni meccanismi di regolazione del complesso detto 'microprocessore', che controlla la biogenesi dei microRNA [Spadotto et al. Acidi Nucleici Res. 2020; Marinaro et al., EMBO Rep 2017]; iv) definire i meccanismi trascrizionali che controllano la plasticità trascrizionale, l'identità e la differenziazione delle cellule staminali, in particolare nel carcinoma mammario e delineando il ruolo degli RNA non codificanti [Bonetti et al. Oncogene 2019; Santoro et al. Cell Reports 2019; Rossi et al Nat. Comm 2019; Culurgioni et al Nat. Comm. 2019; Pons et al Stem Cell Reports 2017 e

2019]; e infine v) evidenziare le modalità e i meccanismi che controllano la degradazione dei microRNA, su cui il mio laboratorio ha dato un contributo fondamentale negli utlimi anni caratterizzando il *decay* dei miRNA nelle cellule di mammifero [Marzi, Ghini et al. Genome Res. 2016] e svelando il coinvolgimento di un nuovo meccanismo, chiamato TDMD (degradazione del miRNA dipendente dal target) [Ghini, Rubolino et al Nat Comm.2018].

Nel corso degli anni ho stabilito una fitta rete di interazioni scientifiche all'interno della comunità che studia la biologia dell'RNA, coinvolgendo sia istituti italiani (altri centri IIT, IFOM, IEO) che all'estero, nonché coinvolgendo unità cliniche (ad esempio dell'ospedale IEO e del San Raffaele) per lo studio degli RNA non codificanti nei tumori umani. Da menzionare la collaborazione con il prof. Andrea Ventura, presso il Memorial Sloan Kettering Cancer Center (MSKCC - New York), il prof. John Marioni presso il CRUK Cambridge Institute (Università di Cambridge), Irene Papatheodorou presso l'European Bioinformatics Institute (EMBL-EBI), Yasuhiro Murakawa al RIKEN (Wako, Giappone), Ulf Orom all'Università di Aarhus (Denkamrk), prof. Michele Trabucchi all'Università di Nizza Sophia Antipolis (Nizza, Francia), Claudia Kutter al Karolinska Institutet (Stoccolma, Svezia), Ewan Birney co-direttore di EMBL-EBI (Hinxton, Regno Unito).

ISTRUZIONE E FORMAZIONE

2001 – 2005 Dottorato di Ricerca (PhD in Life Science) - Open University, London (U.K.)
- **Affiliated Reserach Center**: Istituto Europeo di Oncologia (IEO), Milano
- **PhD Supervisor**: prof. Pier Paolo Di Fiore
- **Thesis Title**: E1A-induced genes in cell cycle re-entry on TD cells: cell cycle regulation and involvement in cancer

2001 – 2002 Corso di Specializzazione post-laurea - Università degli studi di Milano
- **Title**: "POSTGEN - post-genomic technologies integration systems"

1995 – 2000 Laurea (vecchio ordin.) in Scienze Biologiche, Università degli studi di Bari
- **Indirizzo di specializzazione:** Biologia Molecolare
- **Votazione finale:** 110/110 cum laude
- **Supervisor:** prof. Raffaele Gallerani
- **Thesis Title:** " Analisi trascrizionale del raggruppamento genico trnC-trnN-trnY nel genoma mitocondiale di Helianthus annuus"

ABILITAZIONE SCIENTIFICA NAZIONALE

- Abilitazione Scientifica come Professore di II Fascia
  - **05/E2 BIOLOGIA MOLECOLARE** (valido dal 7/12/2017 al 7/12/2023)
  - **05/F1 BIOLOGIA APPLICATA** (valido dal 30/11/2017 al 30/11/2023)

ESPERIENZA PROFESSIONALE

2017 – Present Direttore di Centro (Centre Coordinator)
CGS@SEMM Milano – Istituto Italiano di Tecnologia
- **Manager Activities**: managing budget, personnel and facilities for the entire centre
- **Research Activities**: Coordinating research activity of the 'noncoding genome lab' and scientific direction of the research center
- Networking and scientific liaisons at national and international level
- Securing funding
- Teaching (sporadic activity) for PhD students enrolled at European School of Molecular Medicine (SEMM) - Milan

2012 – Present Group Leader (Researcher) – NonCoding Genome Lab
CGS@SEMM Milano – Istituto Italiano di Tecnologia
- **Research Activity**: Coordinating research activity of the 'microRNA and noncoding genome lab', Supervision and training of undergraduate and PhD students;
- grant application writing
- Teaching (sporadic activity) for PhD students enrolled at at European School of Molecular Medicine (SEMM) - Milan

2012 – 2014 Consulente Scientifico
Istituto Europeo di Oncologia (IEO), Milano
- Advising on the development of cancer diagnosis tools based on circulating microRNAs

2011 - 2012 Scientist
Istituto Europeo di Oncologia (IEO), Milano
- Group Leader: Pier Paolo Di Fiore
- Coordinating research projects; Supervising and training undergraduate and PhD students

2005 – 2011 Post-Doctoral Fellow
IFOM - FIRC Institute for Molecular Oncology, Milano

▪ Group Leader: Pier Paolo Di Fiore

2001 – 2005 PhD Fellow
IFOM - FIRC Institute for Molecular Oncology, Milano
▪ Group Leader: Pier Paolo Di Fiore

2000 – 2001 Research Fellow
IFOM - FIRC Institute for Molecular Oncology, Milano
▪ Group Leader: Pier Paolo Di Fiore

Attività di ricerca e scientifiche

Finanziamenti Competitivi in qualità di Responsabile Scientifico

- **2020 - 2025** **AIRC (Italian Association for Cancer Research) -** Investigator Grant Award
  - Title: Target-directed miRNA degradation mechanism: role and implications in breast cancer**. Grant code:** IG22851
  - contributo finanziato di **945.000,00** euro a **FN** come Principal Investigator.
- **2016 – 2020** **Cariplo Foundation -** Investigator Grant Award**.**
  - Title: The Role of the astrocyte-mediated circadian clock in neurodegeneration and brain aging
  - contributo finanziato di **325.500,00** euro a **FN** come Principal Investigator
- **2016-2019** **AIRC (Italian Association for Cancer Research) -** Investigator Grant Award
  - Title: MicroRNA degradation dynamics in human cancer**. Grant code:** IG14085
  - contributo finanziato di **573.000,00** euro a **FN** come Principal Investigator.
- **2016-2019** **AIRC (Italian Association for Cancer Research) -** Investigator Grant Award
  - Title: Non-coding RNAs as modifiers of stem cell properties in breast cancer: a whole genome approach**. Grant code:** IG18774
  - contributo finanziato di **285.000,00** euro a **FN** come Principal Investigator.
- **2012-2013** **Umberto Veronesi Foundation -** Research Grant Award
  - Title: Identification of circulating non-coding RNAs as biomarkers for tumor diagnosis by "next-generation sequencing**. Grant code:** IG18774
  - contributo finanziato di **110.000,00** euro a **FN** come Principal Investigator.

Partecipazione a comitati editoriali di riviste scientifiche e attività di peer-reviewing

- **Associated Editor** for Frontiers in Molecular Biosciences – section Ribonucleoprotein Networks
- **Reviewer for the following journals:** Molecular Cell, Nucleic Acid Research, Journal of Cell Biology, Clinical Chemistry, FEBS journal, Molecular Biotechnology, Acta Biochimica Biophysica Sinica, Gene, PLOS One, Journal of Thoracic Oncology, Molecular Oncology, BMC Cancer, BMC Genomics, Oncotarget, Briefings in Functional genomics, Frontiers

Affiliazione ad accademie scientifiche nazionali e internazionali

- **RNA Society** (Full Member since 2016);
- **AACR -** American Association for Cancer Research (Active Member since 2018);
- **ABCD** – Associazione di Biologia Cellulare e di Differenziamento (Member since 2011);
- **EACR** - European Association for Cancer Research (Member since 2007);
- **SIBBM** – Società Italiana di Biofisica e di Biologia Molecolare (Member since 2019);

Attività di valutazione nell'ambito di procedure di selezione competitive nazionali e internazionali

- **Reviewer Panel Member** for the following agencies/programs:
  - ***PRIN*** (Progetti di Ricerca di Rilevante Interesse Nazionale) 2017 – ITALY
  - ***FNSNF*** (Swiss national Science Foundation) - Switzerland
  - ***MRC*** - Medical Research Council - UK –
  - ***BBSRC*** (Biotechnology and Biological Sciences Research Council) – UK
  - ***ANR*** – Agencie Nationale de la Recherche - FRANCE
  - ***NWO*** - Netherlands Organisation for Scientific Research - Netherlands
  - Ministry of Education of the Hellenic Republic– **Thalis program**, Research Grant and post-doctoral fellowships- Greece
  - **BSF**- U.S.-Israel Binational Science Foundation - Israel

Pubblicazione Brevetti

- **Patent application, International Publication No WO/2006/037462 PCT/EP2005/010153 CANCER MARKERS:** The invention relates to novel markers for cancer, and the use of these markers in assessment of disease conditions and in therapy. The invention relates to methods of diagnosis and prognosis of cancer, the methods comprising determining the level of one or more gene products. In addition, the invention relates to modulators of the gene products for use in treatment of cancer. The genes include E1A-induced genes and Numb. FN is co-inventor of the patent
- **Patent application, International Publication No WO/2008/125791 PCT/GB2007/001343 CANCER MARKERS:** The invention relates to novel markers for cancer, and the use of these markers in assessment of disease conditions and particularly in prognosis and in therapy of Lung Cancer. The invention relates to methods of diagnosis and prognosis of cancer, and in particular NSCLC, the methods comprising

determining the expression level of one or more genes. In some embodiments the invention relates to prognosis of early stage NSCLC. FN is co-inventor of the patent.

- **Patent application, International Publication No WO/2012/089630 A1 PCT/EP2011/073868 A METHOD TO IDENTIFY ASYMPTOMATIC HIGH-RISK INDIVIDUALS WITH EARLY STAGE LUNG CANCER BY MEANS OF DETECTING miRNAs IN BIOLOGIC FLUIDS:** The object of the invention is a predictive method for the detection and/or exclusion of lung cancer, which involves the measurement of expression levels of miRNA in the test sample, involving: — Detection, in the biological sample, of at least 3 miRNAs from the list of 24 miRNAs, and determination of the amounts of the indicated miRNAs relative to the control sample. Furthermore, an object of the invention is also the use of this method for the detection of lung cancer in individuals at high risk of lung cancer.
- **Patent application, International Publication WO/2016/038119 A1 PCT/EP2015/070664 METHOD FOR LUNG CANCER TREATMENT:** The disclosure describes a method for diagnosing lung cancer in a subject by detecting in a biological sample obtained from that patient a miRNA signature, the presence of which provides an earlier indication of cancer than alternative art-recognized methods, including, but not limited to, low-dose computed tomography (LDCT).

Partecipazione come Relatore a Convegni a Carattere Scientifico in Italia o all'estero (ultimi 5 anni)

- 2019 (13th December) ***Invited Speaker*** at the Hereditary Breast and Gastric Cancers: Prevention, Genetics and Care (Milan, Italy) Talk Title: "Transcriptional evolution of TNBC cancer cells upon chemo-adaptation. A whole genome approach"
- 2019 (9th -10th December) ***Invited Speaker*** at the Hellenic Society for Computational Biology and Bioinformatics HSCBB meeting (Patras, Greece) Talk Title: "*microRNA degradation in human physiology and pathology*"
- 2019 (18th -13th June) ***Oral presentation*** at the Aegean Conference on the Short and Long of non-coding RNAs (Chania, Crete, Greece) Talk Title: "*microRNA degradation in human physiology and pathology*"
- 2018 (25th - 30th Sep) ***Invited Speaker*** at the Ettore Majorana Workshop "Epigenetics in Cognition" (Erice, Italy) Talk Title: "*Transcriptional dynamics and brain plasticity by long non-coding RNAs"*
- 2017 (22th Sep) ***Invited Speaker*** at the 3rd Annual Meeting of SIC young investigator (Ariano Irpino, AV, Italy) Talk Title: "*Non-coding RNAs in breast cancer*"
- 2017 (13th – 16st Sep) Selected ***Oral presentation*** at the EMBO symposia 2017: Non-coding Genome (Heidelberg) Talk Title: "*Endogenous transcripts control miRNA levels and activity in mammalian cells by a target-induced miRNA degradation mechanism*"
- 2017 (9th -14th June) Selected ***Oral presentation*** at the Aegean Conference on the Short and Long of non-coding RNAs (Heraklion, Crete, Greece) Talk Title: "*Endogenous transcripts control miRNA levels and activity in mammalian cells by a target-induced miRNA degradation mechanism*"
- 2017 (8th May) Selected ***Oral presentation*** at " The British Association for Cancer Research meeting (BACR): Non-Coding RNAs in Cancer and Development" (London) Talk Title: "*MiR-34a controls proliferation and plasticity of early-progenitors in the normal mammary gland and in breast cancer*"
- 2016 (24th - 28th Jan) Selected ***Oral presentation*** at the "Keystone meeting: small RNA silencing (A6, Keystone) Talk Title: "*Insights into Function and Regulation of MicroRNAs by Decoding Degradation Dynamics*"
- 2015 (18th – 21st Oct) Selected ***Oral presentation*** at the EMBO symposia 2015: Non-coding Genome (Heidelberg) Talk Title: "*Insights into function and regulation of microRNAs by decoding degradation dynamics*"
- 2015 (7th – 8st Sep) ***Invited speaker*** at the "RNA day 2015" - University Sapienza (Rome) Talk Title: "*Insights into miRNA functions and regulation by their degradation dynamics"*

Attività gestionali, organizzative o di servizio

Since 2017	Management of the **Budget** of CGS-IIT@SEMM
Since 2017	Renewal of legal contracts for grant functionality of CGS-IIT@SEMM, including renting laboratory and office space, administration contracts, Convenzione with surrounding entities and IP related documents.
Since 2017	Coordinator of the **Genomic Unit,** run in partnership between IEO and IIT - development and optimization of genomics applications and work-flows
Since 2017	Co-supervision of the **Computational Research Unit** of CGS-IIT@SEMM – maintenance of the genomic infrastructure for IIT and development of valuable genomics applications
2019	Coordinator of the **"Single Cell Program" 2.0** – implementation of single-cell technology within the Genomic Unit (single-cell ATAC-seq; single-cell CNV; hashing; CROP-seq)
2019	Scientific Member of the **"Single Molecule Program"**– implementation of Nanopore single molecule technology within the Genomic Unit
2018	Coordinator of the **"Single Cell Program"** 1.0 – implementation of single-cell technology within the Genomic Unit (single-cell RNA-seq)
2016 - 2020	**Scientific Member of the O.P.B.A.** (Organism for the protection of animals used for scientific purposes) at the IFOM-IEO-IIT Campus

Lingue Straniere

Lingua madre: italiano

Lingue straniere	COMPRENSIONE		PARLATO		PRODUZIONE SCRITTA
	Ascolto	Lettura	Interazione	Produzione orale	
inglese	C1	C1	C1	C1	C1

Livelli: A1 e A2: Utente base - B1 e B2: Utente autonomo - C1 e C2: Utente avanzato
Quadro Comune Europeo di Riferimento delle Lingue

Attività didattica

Since 2017	**Internal Examiner** on the Ph.D. Degree in System Medicine at European School of Molecular Medicine (SEMM) of 3 students
Since 2014	**Internal advisor** of 7 PhD students of the Ph.D. Degree in System Medicine at European School of Molecular Medicine (SEMM)
Since 2012	**External examiner** of 3 students for the M.Sc. Degree at Vita-Salute San Raffaele University (UniSR), Milan, Italy
Since 2016	**Lecturer** on the Genomics Course for PhD students at European School of Molecular Medicine (SEMM) – Title 'Genomics and Molecular Oncology of RNA'
2016	**Lecturer** on the PhD students Course at University of Pavia, Pavia (Italy). Series of lectures on RNA genomics
2012-2020	**Supervision** of 9 Post-doctoral Scientists at CGS@SEMM, 3 PhD Students at European School of Molecular Medicine (SEMM), 2 Master Students at Bicocca University, Milan (Italy)
2014-2017	Co-**Supervision** of 5 PhD Students at European School of Molecular Medicine (SEMM) - (jointly with Pier Paolo Di Fiore)
2005 – 2012	Co-**Supervision** 2 Post-doctoral Research Scientists at IEO, Milan (Italy), 5 PhD Students at SEMM - European School of Molecular Medicine, University of Milan (Italy) and 3 Master Students at University of Milan (Italy), University of Bologna (Italy) and University Vita-Salute San Raffaele, Milan (Italy) - (jointly with Pier Paolo Di Fiore)

Attività di disseminazione scientifica

Since 2015	Thematic conferences and lectures to primary/secondary schools sponsored by AIRC, Associazione Italiana Ricerca sul Cancro
Since 2018	Testimonial AIRC, Associazione Italiana Ricerca sul Cancro – interviews and media participation in awareness-raising initiatives
Since 2018	interviews and media participation for scientific dissemination (RAITRE "Tuttasalute"; TV2000 "Siamo noi"; TV Memex - Rai Scuola; Wired Next Festival – Firenze; Canale5 "Mattino5")

PUBBLICAZIONI SCIENTIFICHE

Total Publications: 33 **Peer-Reviewed**: 29 **Last/Co-last:** 9 **First/Co-first:** 4; **h-index** (scopus): 16

1. Spadotto V, Giambruno R, Massignani E, Mihailovich M, Maniaci M, Patuzzo F, Ghini F, Nicassio F, Bonaldi T. PRMT1-mediated methylation of the microprocessor-associated proteins regulates microRNA biogenesis. ***Nucleic Acids Res***. 2020;48(1):96-115. doi:10.1093/nar/gkz1051
2. Pons-Espinal M, Gasperini C, Marzi MJ, Braccia C, Armirotti A, Pötzsch A, Walker TL, Fabel K, Nicassio F, Kempermann G, De Pietri Tonelli D. "MiR-135a-5p Is Critical for Exercise-Induced Adult Neurogenesis" **Stem Cell Reports. 2019** Jun 11; 12(6):1298-1312. doi: 10.1016/j.stemcr.2019.04.020
3. Rossi M, Bucci G, Rizzotto D, Bordo D, Marzi MJ, Puppo M, Flinois A, Spadaro D, Citi S, Emionite L, Cilli M, Nicassio F, Inga A, Briata P, Gherzi R. "LncRNA EPR controls epithelial proliferation by coordinating Cdkn1a transcription and mRNA decay response to TGF-β" **Nat Commun. 2019** Apr 29;10(1):1969. doi: 10.1038/s41467-019-09754-1
4. Panebianco F, Climent M, Malvindi MA, Pompa PP, Bonetti P, **Nicassio F**. "Delivery of biologically active miR-34a in normal and cancer mammary epithelial cells by synthetic nanoparticles" **Nanomedicine. 2019** Apr 25; 19:95-105. doi: 10.1016/j.nano.2019.03.013
5. Santoro A, Vlachou T, Luzi L, Melloni G, Mazzarella L, D'Elia E, Aobuli X, Pasi CE, Reavie L, Bonetti P, Punzi S, Casoli L, Sabò A, Moroni MC, Dellino GI, Amati B, Nicassio F, Lanfrancone L, Pelicci PG. "p53 Loss in Breast Cancer Leads to Myc Activation, Increased Cell Plasticity, and Expression of a Mitotic Signature with Prognostic Value" **Cell Rep. 2019** Jan 15; 26(3):624-638.e8. doi: 10.1016/j.celrep.2018.12.071
6. Bonetti P, Climent M, Panebianco F, Tordonato C, Santoro A, Marzi MJ, Pelicci PG, Ventura A, **Nicassio F.** "Dual role for miR-34a in the control of early progenitor proliferation and commitment in the mammary gland and in breast cancer" **Oncogene.2019** Jan; 38(3):360-374. doi: 10.1038/s41388-018-0445-3

7. Ghini F, Rubolino C, Climent M, Simeone I, Marzi MJ, **Nicassio F**. "Endogenous transcripts control miRNA levels and activity in mammalian cells by target-directed miRNA degradation" **Nat Commun.** 2018;9(1):3119. doi:10.1038/s41467-018-05182-9
8. Culurgioni S, Mari S, Bonetti P, Gallini S, Bonetto G, Brennich M, Round A, Nicassio F, Mapelli M. "Insc:LGN tetramers promote asymmetric divisions of mammary stem cells" **Nat Commun. 2018** Mar 9;9(1):1025. doi: 10.1038/s41467-018-03343-4.
9. Pons-Espinal M, de Luca E, Marzi MJ, Beckervordersandforth R, Armirotti A, Nicassio F, Fabel K, Kempermann G, De Pietri Tonelli D. "Synergic Functions of miRNAs Determine Neuronal Fate of Adult Neural Stem Cells" **Stem Cell Reports. 2017** Apr 11;8(4):1046-1061. doi: 10.1016/j.stemcr.2017.02.012. Epub 2017 Mar 16.
10. Marinaro F, Marzi MJ, Hoffmann N, Amin H, Pelizzoli R, Niola F, Nicassio F, De Pietri Tonelli D. "MicroRNA-independent functions of DGCR8 are essential for neocortical development and TBR1 expression." **EMBO Rep. 2017** Apr;18(4):603-618. doi: 10.15252/embr.201642800. Epub 2017 Feb 23.
11. Marzi MJ, Montani F, Carletti RM, Dezi F, Dama E, Bonizzi G, Sandri MT, Rampinelli C, Bellomi M, Maisonneuve P, Spaggiari L, Veronesi G, Bianchi F, Di Fiore PP, **Nicassio F.** "Optimization and Standardization of Circulating MicroRNA Detection for Clinical Application: The miR-Test Case." **Clin Chem. 2016** May;62(5):743-54. doi: 10.1373/clinchem.2015.251942.
12. Marzi MJ, Ghini F, Cerruti B, de Pretis S, Bonetti P, Giacomelli C, Gorski MM, Kress T, Pelizzola M, Muller H, Amati B, **Nicassio F.** "Degradation dynamics of microRNAs revealed by a novel pulse-chase approach." **Genome Res. 2016** Apr;26(4):554-65. doi: 10.1101/gr.198788.115. Epub 2016 Jan 28.
13. Tordonato C, Di Fiore PP, **Nicassio F**. "The role of non-coding RNAs in the regulation of stem cells and progenitors in the normal mammary gland and in breast tumors." **Front Genet. 2015** Feb 27;6:72. doi: 10.3389/fgene.2015.00072. eCollection 2015. **Review.**
14. Montani F, Marzi MJ, Dezi F, Dama E, Carletti RM, Bonizzi G, Bertolotti R, Bellomi M, Rampinelli C, Maisonneuve P, Spaggiari L, Veronesi G, Nicassio F, Di Fiore PP, Bianchi F. "miR-Test: a blood test for lung cancer early detection." **J Natl Cancer Inst. 2015** Mar 19;107(6):djv063. doi: 10.1093/jnci/djv063. Print 2015 Jun.
15. Monterisi S, D'Ario G, Dama E, Rotmensz N, Confalonieri S, Tordonato C, Troglio F, Bertalot G, Maisonneuve P, Viale G, Nicassio F, Vecchi M, Di Fiore PP, Bianchi F. "Mining cancer gene expression databases for latent information on intronic microRNAs." **Mol Oncol. 2015** Feb;9(2):473-87. doi: 10.1016/j.molonc.2014.10.001. Epub 2014 Oct 15.
16. Marchesi S, Montani F, Deflorian G, D'Antuono R, Cuomo A, Bologna S, Mazzoccoli C, Bonaldi T, Di Fiore PP*, **Nicassio F*.** "DEPDC1B coordinates de-adhesion events and cell-cycle progression at mitosis." **Dev Cell. 2014** Nov 24;31(4):420-33. doi: 10.1016/j.devcel.2014.09.009. Epub 2014 Nov 24. (* equal contribution)
17. Muller H, Marzi MJ, **Nicassio F**. "IsomiRage: From Functional Classification to Differential Expression of miRNA Isoforms." **Front Bioeng Biotechnol. 2014** Sep 29;2:38. doi: 10.3389/fbioe.2014.00038. eCollection 2014.
18. Tinarelli F, Garcia-Garcia C, Nicassio F, Tucci V. "Parent-of-origin genetic background affects the transcriptional levels of circadian and neuronal plasticity genes following sleep loss." **Philos Trans R Soc Lond B Biol Sci. 2014** Jan 20;369(1637):20120471. doi: 10.1098/rstb.2012.0471.
19. D'Antonio M, Guerra RF, Cereda M, Marchesi S, Montani F, Nicassio F, Di Fiore PP, Ciccarelli FD. "Recessive cancer genes engage in negative genetic interactions with their functional paralogs." **Cell Rep. 2013** Dec 26;5(6):1519-26. doi: 10.1016/j.celrep.2013.11.033. Epub 2013 Dec 19.
20. Marzi MJ, Puggioni EM, Dall'Olio V, Bucci G, Bernard L, Bianchi F, Crescenzi M, Di Fiore PP, **Nicassio F**. "Differentiation-associated microRNAs antagonize the Rb-E2F pathway to restrict proliferation." **J Cell Biol. 2012** Oct 1;199(1):77-95. doi: 10.1083/jcb.201206033.
21. Bianchi F*, **Nicassio F***, Marzi M, Belloni E, Dall'olio V, Bernard L, Pelosi G, Maisonneuve P, Veronesi G, Di Fiore PP. "A serum circulating miRNA diagnostic test to identify asymptomatic high-risk individuals with early stage lung cancer." **EMBO Mol Med. 2011** Aug;3(8):495-503. doi: 10.1002/emmm.201100154. Epub 2011 Jul 11. (* equal contribution)
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Data	7/07/2020	Luogo	MILANO