

CURRICULUM VITAE



Cognome e nome: **GHIGNA Claudia**

Nata a: Pavia il 03.09.1971

Indirizzo di lavoro: Istituto di Genetica Molecolare del Consiglio Nazionale delle Ricerche (IGM-CNR), via Abbiategrasso, 207 – 27100, Pavia

Tel.: 0382-546324

Fax: 0382-422286

E-mail: arneri@igm.cnr.it

Educazione/Attività lavorative

2004-2005 Visiting Scientist, Howard Hughes Medical Institute - HHMI, University of Massachusetts Medical School, Worcester, MA, USA;

2001-oggi Ricercatore a tempo indeterminato dell'Istituto di Genetica Molecolare del Consiglio Nazionale delle Ricerche (IGM-CNR) di Pavia;

2000 Scuola Avanzata di Studi Integrati (SAFI), Istituto degli Studi Superiori, Università di Pavia;

2000 Dottorato in Scienze Genetiche e Biomolecolari, Università di Pavia;

1997 Abilitazione alla professione di biologo, Università di Pavia;

1995 Laurea in Scienze Biologiche (110/110, cum laude), Università di Pavia.

Riconoscimenti

2001 Borsa di studio del Consiglio Nazionale delle Ricerche (CNR);

1997 Borsa di studio Adriano Buzzati Traverso;

1996- Borsa di studio Adriano Buzzati Traverso.

Responsabile di Progetto

- 2019-2023 Italian Association for Cancer Research (AIRC) project: 21966
- 2016-2018 Italian Association for Cancer Research (AIRC) project: 17395
- 2014-2015 Fondazione Banca del Monte di Lombardia
- 2011-2014 Worldwide Cancer Research (ex AICR-UK) project: 11-0622
- 2012-2015 Italian Association for Cancer Research (AIRC) project: 11913
- 2005 Short Mobility Grant CNR
- 2004 Short Mobility Grant CNR

Inviti come oratore

- Interplay between RNA binding proteins and non coding RNA's. Fondazione Mondino di Pavia 27-28th June 2019 (Pavia, Italy)
- Meeting SIICA (Italian Society of Immunology, Clinical Immunology and

Allergology) 25-27 May 2015. Certosa di Pontignano (Siena, Italy)

- The regulation of the metabolism of nucleic acids as a source of new opportunities for therapeutic intervention, PhD in Genetic and Biomolecular Sciences, University of Pavia (Italy), 12-15 April 2011
- Pre-mRNA maturation from molecular biology to pathology” PhD in Genetic and Biomolecular Sciences, University of Pavia (Italy), 18-25 March 2010;
- Meeting EURASNET (“European Alternative Splicing Network of Excellence”), 1-4 March 2010 Lisbon, Portugal
- International Meeting FISV (Italian Federation of Life Sciences), 23-25 September 2009, Riva del Garda, Italy
- Meeting EURASNET (“European Alternative Splicing Network of Excellence”) “Alternative Splicing”, 21-23 May 2008, Krakow, Poland;
- “Alternative Splicing and Disease Workshop”, 18 – 23 February 2008, University of Montpellier II, France
- “Alternate Transcript Diversity – Biology and Therapeutics” EMBL, 21-23 March, 2006, Heidelberg, Germania;
- 8th Annual Meeting of the RNA Society, 1-6 July 2003, Vienna - Austria;
- “RNA day”, 28 January, 2003, La Sapienza University, Rome.

Corsi

- “RNA Therapeutics Workshop”, sponsorizzato da Harvard Medical School – Portugal Program and European Network of Excellence on Alternative Splicing, EURASNET, 2010 Lisbona, Portogallo;
- “RNA Structure and Function”, International Centre for Genetic Engineering and Biotechnology - ICGEB, 1996 Trieste, Italia.

Attività di Revisore

Referente di Riviste Internazionali: Science, Nature Communications, Molecular Cancer, Nucleic Acids Research, Trends in Molecular Medicine, Cancers, Scientific Reports, Human Molecular Genetics, PLOS ONE, Atherosclerosis, BMC Cancer, PeerJ, Journal of Experimental & Clinical Cancer Research, Frontiers in Genetics, Aging-us, Future Oncology, Apoptosis, BioMed Research International, International Journal of Molecular Sciences, Acta Biochimica et Biophysica Sinica, FEBS letter, Human Cell, Cellular and Molecular Neurobiology, Oncotarget, Molecular Medicine, DNA and Cell Biology, Journal of Molecular Medicine, World Journal of Gastroenterology, Journal of Cellular Biochemistry, Journal of Cardiovascular Medicine, Gene, Clinical and Experimental metastasis, International Journal of Cancer, Neurological Sciences, Biochimica et Biophysica Acta (BBA).

Referente di Agenzie di Ricerca: University of Rome Tor Vergata (Beyond Borders) Italy, FIRB Giovani 2013 (Italian Ministry of University and Research); AIDS Grant Programme (Italian Ministry of Health); Bandi SIR (Italian Ministry of University and Research), The Wellcome Trust/DBT-India Alliance; The Wellcome Trust, London-UK; "Rita Levi Montalcini Program" (Italian Ministry University and Research); North West Cancer Research Grant Application-UK; ICGEB (International Centre for Genetic Engineering and Biotechnology) Research Grants (Trieste Italy); French National Research Agency (ANR); ANVUR (Italian National Agency for the Evaluation of the University System and Research).

La Dott.ssa Ghigna è inclusa nel registro degli esperti scientifici indipendenti italiani e stranieri (Ministero dell'Università e Ricerca, <https://reprise.cineca.it>)

Attività di Editore

- **2019. Special Issue:** “Alternative Splicing: Recent Insights into Mechanisms and Functional Role” in *Cells*”; ISSN 2073-4409
- **2015. Special Issue:** “Posttranscriptional Regulation and RNA Binding Proteins in Cancer Biology”. *BioMed Research International*.
- **2013. Special Issue:** “Alternative splicing: role in cancer development and progression” in *International Journal of Cell Biology*

Editorial Board

Associate Editor di “Frontiers in Genetics” (RNA section)
<http://journal.frontiersin.org/journal/genetics#editorial-board>

Abilitazione Scientifica Nazionale Professore II Fascia

Settori:

- 05-F1 BIOLOGIA APPLICATA
- 05-E2 BIOLOGIA MOLECOLARE
- 05-I1 GENETICA

Premi

Vincitrice nell’anno 2009 di un premio destinato a giovani ricercatori del Consiglio Nazionale delle Ricerche (CNR).

COLLABORAZIONI SCIENTIFICHE

- Prof. Elisabetta Dejana (IFOM-IEO, Milano - Italia);
- Prof. Anne Eichmann (Yale University School of Medicine, New Haven, CT, USA);
- Prof. Benjamin J. Blencowe (University of Toronto, Toronto - Canada);
- Patrick Mehlen, director | Fondation Synergie Lyon Cancer (EN
- Dr. Ugo Cavallaro (European Institute of Oncology - IEO, Milano - Italy);
- Prof. Daniel Nyqvist (Department of Medical Biochemistry and Biophysics, Karolinska Institutet, Stockholm - Sweden);
- Dr. Manuel Irimia (EMBL/CRG Research Unit in Systems Biology, Centre for Genomic Regulation (CRG), Barcelona – Spain);
- Dr. Marco Presta (Department of Molecular and Translational Medicine, University of Brescia, Brescia - Italy);
- Prof. Francisco Baralle (International Centre for Genetic Engineering and Biotechnology - ICGEB, Trieste - Italy);
- Dr. Serena Zacchigna (Molecular Medicine Laboratory, ICGEB, Trieste – Italy).
- Dr. Emanuele Buratti (International Centre for Genetic Engineering and Biotechnology - ICGEB, Trieste - Italy);
- Dr. Davide Gabellini (Fondazione San Raffaele del Monte Tabor, Milano – Italia);
- Dr. Carla Taveggia (Fondazione San Raffaele del Monte Tabor, Milano – Italia);

- Dr. Giuseppe Biamonti (Institute of Molecular Genetics, National Research Council IGM-CNR, Pavia – Italy);
- Prof. Michael R. Green (Howard Hughes Medical Institute, University of Massachusetts Medical School, Worcester, Massachusetts - USA);
- Prof. Claudio Sette (University of Rome Tor Vergata, Roma - Italy);
- Dr. Maria Paola Paronetto (Department of Movement, Human and Health Sciences Università del Foro Italico, Roma - Italy).
- Dr. Federico Forneris (Armenise-Harvard Laboratory of Structural Biology, Dept. Biology and Biotechnology, University of Pavia, Pavia, - Italy);

PUBBLICAZIONI

1. Belloni E, Di Matteo A, Pradella D, Vacca M, Wyatt CDR, Alfieri R, Maffia A, Sabbioneda S, **Ghigna C**. Gene Expression Profiles Controlled by the Alternative Splicing Factor Nova2 in Endothelial Cells. *Cells*. 2019; **8**: pii: E1498
2. Biamonti G, Amato A, Belloni E, Di Matteo A, Infantino L, Pradella D, **Ghigna C**. Alternative splicing in Alzheimer's disease. *Aging Clin Exp Res*. 2019 Oct 3.
3. Angiolini F, Belloni E, Giordano M, Campioni M, Forneris F, Paronetto MP, Lupia M, Brandas C, Pradella D, Di Matteo A, Giampietro C, Jodice G, Luise C, Bertalot G, Freddi S, Malinverno M, Irimia M, Moulton JD, Summerton J, Chiapparino A, Ghilardi C, Giavazzi R, Nyqvist D, Gabellini D, Dejana E, Cavallaro U, **Ghigna C**. A novel L1CAM isoform with angiogenic activity generated by NOVA2-mediated alternative splicing. *Elife*. 2019, **8**: pii: e44305.
4. Nakka K, **Ghigna C**, Gabellini D, Dilworth FJ. Diversification of the muscle proteome through alternative splicing. *Skelet Muscle*. 2018; **8**:8.
5. Pradella D, Naro C, Sette C, **Ghigna G**. EMT and stemness: flexible processes tuned by alternative splicing in development and cancer progression. *Mol Cancer*. 2017, **16**: 8. IF=
6. Giampietro C, Deflorian G, Gallo S, Di Matteo A, Pradella D, Bonomi S, Belloni E, Nyqvist D, Quaranta V, Confalonieri S, Bertalot G, Orsenigo F, Pisati F, Ferrero E, Biamonti G, Fredrickx E, Taveggia C, Wyatt CD, Irimia M, Di Fiore PP, Blencowe BJ, Dejana E, **Ghigna C**. The alternative splicing factor Nova2 regulates vascular development and lumen formation. *Nat Commun*. 2015; **6**: 8479.
7. **Ghigna C**§, Cartegni L, Jordan P, Paronetto MP. Posttranscriptional Regulation and RNA Binding Proteins in Cancer Biology. *Biomed Res Int*. 2015; **2015**: 897821.
§Corresponding author
8. Frisone P, Pradella D, Di Matteo A, Belloni E, **Ghigna C**§, Paronetto MP. SAM68: signal transduction and RNA metabolism in human cancer. *Biomed Res Int*. 2015; **2015**: 528954.
§Corresponding author
9. Loh TJ, Cho S, Moon H, Jang HN, Williams DR, Jung DW, Kim IC, **Ghigna C**, Biamonti G, Zheng X, Shen H. hnRNP L inhibits CD44 V10 exon splicing through interacting with its upstream intron. *Biochim Biophys Acta*. 2015; **1849**: 743-50.
10. Moon H, Cho S, Loh TJ, Oh HK, Jang HN, Zhou J, Kwon YS, Liao DJ, Jun Y, Eom S, **Ghigna C**, Biamonti G, Green MR, Zheng X, Shen H. SRSF2

- promotes splicing and transcription of exon 11 included isoform in Ron proto-oncogene. *Biochim Biophys Acta*. 2014 Nov; 1839: 1132-40.
11. Biamonti G, Catillo M, Pignataro D, Montecucco A, **Ghigna C**. The alternative splicing side of cancer. *Semin Cell Dev Biol*. 2014; 32:30-6.
 12. Sette C, Ladomery M, **Ghigna C**. Alternative splicing: role in cancer development and progression. *Int J Cell Biol*. 2013; 2013: 421606.
 13. Bonomi S, Gallo S, Catillo M, Pignataro D, Biamonti G, **Ghigna C**. Oncogenic alternative splicing switches: role in cancer progression and prospects for therapy. *Int J Cell Biol*. 2013; 2013: 962038.
 14. **Ghigna C**, Riva S, Biamonti G. Alternative splicing of tumor suppressors and oncogenes. *Cancer Treat Res*. 2013; 158: 95-117.
 15. Moon H, Cho S, Loh TJ, Zhou J, **Ghigna C**, Biamonti G, Green MR, Zheng X, Shen H. A 2-nt RNA enhancer on exon 11 promotes exon 11 inclusion of the Ron proto-oncogene. *Oncol Rep*. 2014; 31: 450-5.
 16. Siegfried Z, Bonomi S, **Ghigna C**, Karni R. Regulation of the Ras-MAPK and PI3K-mTOR Signalling Pathways by Alternative Splicing in Cancer. *Int J Cell Biol*. 2013; 2013: 568931.
 17. Bonomi S, di Matteo A, Buratti E, Cabianca DS, Baralle FE, **Ghigna C***, Biamonti G. HnRNP A1 controls a splicing regulatory circuit promoting mesenchymal-to-epithelial transition. *Nucleic Acids Res*. 2013; 41: 8665-79.
***Corresponding author**
 18. Biamonti G, Bonomi S, Gallo S, **Ghigna C**. Making alternative splicing decisions during epithelial-to-mesenchymal transition (EMT). *Cell Mol Life Sci*. 2012; 69: 2515-26.
 19. Valacca C, Bonomi S, Buratti E, Pedrotti S, Baralle FE, Sette C, **Ghigna C***, Biamonti G*. Sam68 regulates EMT through alternative splicing-activated nonsense-mediated mRNA decay of the SF2/ASF proto-oncogene. *J Cell Biol*. 2010; 191: 87-99.
Co-last author and corresponding author
 20. **Ghigna C***, De Toledo M, Bonomi S, Valacca C, Gallo S, Apicella M, Eperon I, Tazi J, Biamonti G. Pro-metastatic splicing of Ron proto-oncogene mRNA can be reversed: therapeutic potential of bifunctional oligonucleotides and indole derivatives. *RNA Biol*. 2010; 7: 495-503.
***Corresponding author**
 21. Pistoni M, **Ghigna C**, Gabellini D. Alternative splicing and muscular dystrophy. *RNA Biol*. 2010; 7: 441-52.
 22. **Ghigna C§**, Valacca C, Biamonti G. Alternative splicing and tumor progression. *Current Genomics* 2008; 9: 556-70.

§Corresponding author

23. Valgardsdottir R, Chiodi I, Giordano M, Rossi A, Bazzini S, **Ghigna C**, Riva S, Biamonti G. Transcription of SatelliteIII non-coding RNAs is a general stress response in human cells. *Nucleic Acids Res.* 2008; **36**: 423-34.
24. **Ghigna C**, Giordano S, Shen H, Benvenuto F, Castiglioni F, Comoglio PM, Green MR, Riva S, Biamonti G. Cell motility is controlled by SF2/ASF through alternative splicing of the Ron protooncogene. *Molecular Cell* 2005; **20**: 881-90
25. Chiodi I, Corioni M, Giordano M, Valgardsdottir R, **Ghigna C**, Cobianchi F, Xu RM, Riva S, Biamonti G. RNA recognition motif 2 directs the recruitment of SF2/ASF to nuclear stress bodies. *Nucleic Acids Res.* **32**: 4127-36.
26. Shen H, Kan JL, **Ghigna C**, Biamonti G, Green MR. A single polypyrimidine tract binding protein (PTB) binding site mediates splicing inhibition at mouse IgM exons M1 and M2. *RNA* 2004; **10**: 787-94.
27. **Ghigna C**, Moroni M, Porta C, Riva S, Biamonti G. Altered expression of heterogeneous nuclear ribonucleoproteins and SR factors in human colon adenocarcinomas. *Cancer Res.* 1998; **58**: 5818-24.
28. Biamonti G, **Ghigna C**, Caporali R, Montecucco C. Heterogeneous nuclear ribonucleoproteins (hnRNPs): an emerging family of autoantigens in rheumatic diseases *Clin Exp Rheumatol.* 1998; **16**: 317-26.
29. Camacho-Vanegas O, Weighardt F, **Ghigna C**, Amaldi F, Riva S, Biamonti G. Growth-dependent and growth-independent translation of messengers for heterogeneous nuclear ribonucleoproteins. *Nucleic Acids Res.* 1997; **25**: 3950-4.

CHAPTER IN BOOK

1. Paronetto MP, Gallo S, Di Matteo A, **Ghigna C** (2014). Alternative Pre-mRNA Processing in Cancer Progression: Clinical Significance and Therapeutic Implications. *Global Journal of Human Genetics & Gene Therapy*. Volume 2, No. 1, March 2014; Pages 1-16.
2. Biamonti G and **Ghigna C** (2008). Aberrant alternative splicing: role in tumorigenesis and prospect for therapies. Capitolo nel libro: Multiple pathways towards cancer development. Pubblicato da The Transworld research network, ISBN: 978-81-7895-362-5, pp 87-106.
3. **Ghigna C**, Valacca C, Giordano M, Cabianca D, Carpanelli E, Valgardsdottir R, Chiodi I, Biamonti G (2006). Alternative splicing and cancer: a stressing game? Capitolo nel libro: Alternative Splicing in Cancer. Pubblicato da The Transworld research network, ISBN: 81-7895-235-1, pp 197-208.

4. Valgardsdottir R, Chiodi I, Giordano M, **Ghigna C**, Biamonti G (2004). Nuclear stress bodies: anatomy and physiology of heterochromatin transcription factories. Recent Research Developments in Cell Science, 73-81 ISBN:81-7895, pp 112-6.

ELENCO DELLE PUBBLICAZIONI

1. Pradella D, Naro C, Sette C, **Ghigna G**. EMT and stemness: flexible processes tuned by alternative splicing in development and cancer progression. *Mol Cancer*. 2017, **16**: 8.

IF= 5.888

1. Giampietro C, Deflorian G, Gallo S, Di Matteo A, Pradella D, Bonomi S, Belloni E, Nyqvist D, Quaranta V, Confalonieri S, Bertalot G, Orsenigo F, Pisati F, Ferrero E, Biamonti G, Fredrickx E, Taveggia C, Wyatt CD, Irimia M, Di Fiore PP, Blencowe BJ, Dejana E, **Ghigna C**. The alternative splicing factor Nova2 regulates vascular development and lumen formation. *Nat Commun*. 2015; **6**: 8479.

IF= 11.470

2. **Ghigna C**, Cartegni L, Jordan P, Paronetto MP. Posttranscriptional Regulation and RNA Binding Proteins in Cancer Biology. *Biomed Res Int*. 2015; **2015**: 897821.

IF= 2.706

3. Frisone P, Pradella D, Di Matteo A, Belloni E, **Ghigna C**§, Paronetto MP. SAM68: signal transduction and RNA metabolism in human cancer. *Biomed Res Int*. 2015; **2015**: 528954.

§Corresponding author

IF= 2.706

4. Loh TJ, Cho S, Moon H, Jang HN, Williams DR, Jung DW, Kim IC, **Ghigna C**, Biamonti G, Zheng X, Shen H. hnRNP L inhibits CD44 V10 exon splicing through interacting with its upstream intron. *Biochim Biophys Acta*. 2015; **1849**: 743-50.

IF= 5.440

5. Moon H, Cho S, Loh TJ, Oh HK, Jang HN, Zhou J, Kwon YS, Liao DJ, Jun Y, Eom S, **Ghigna C**, Biamonti G, Green MR, Zheng X, Shen H. SRSF2 promotes splicing and transcription of exon 11 included isoform in Ron proto-oncogene. *Biochim Biophys Acta*. 2014 Nov; **1839**: 1132-40.

IF= 5.440

6. Biamonti G, Catillo M, Pignataro D, Montecucco A, **Ghigna C**. The alternative splicing side of cancer. *Semin Cell Dev Biol*. 2014; **32**:30-6.

IF= 5.971

7. Sette C, Lodomery M, **Ghigna C**. Alternative splicing: role in cancer development and progression. *Int J Cell Biol*. 2013; **2013**: 421606.

8. Bonomi S, Gallo S, Catillo M, Pignataro D, Biamonti G, **Ghigna C**. Oncogenic alternative splicing switches: role in cancer progression and prospects for therapy. *Int J Cell Biol*. 2013; **2013**: 962038.

9. **Ghigna C**, Riva S, Biamonti G. Alternative splicing of tumor suppressors and oncogenes. *Cancer Treat Res*. 2013; **158**: 95-117.

10. Moon H, Cho S, Loh TJ, Zhou J, **Ghigna C**, Biamonti G, Green MR, Zheng X,

Shen H. A 2-nt RNA enhancer on exon 11 promotes exon 11 inclusion of the Ron proto-oncogene. *Oncol Rep.* 2014; 31: 450-5.

IF= 2.191

11. Siegfried Z, Bonomi S, **Ghigna C**, Karni R. Regulation of the Ras-MAPK and PI3K-mTOR Signalling Pathways by Alternative Splicing in Cancer. *Int J Cell Biol.* 2013; 2013: 568931.

12. Bonomi S, di Matteo A, Buratti E, Cabianca DS, Baralle FE, **Ghigna C***, Biamonti G. HnRNP A1 controls a splicing regulatory circuit promoting mesenchymal-to-epithelial transition. *Nucleic Acids Res.* 2013; 41: 8665-79.

***Corresponding author**

IF= 8.808

13. Biamonti G, Bonomi S, Gallo S, **Ghigna C**. Making alternative splicing decisions during epithelial-to-mesenchymal transition (EMT). *Cell Mol Life Sci.* 2012; 69: 2515-26.

IF= 5.856

14. Valacca C, Bonomi S, Buratti E, Pedrotti S, Baralle FE, Sette C, **Ghigna C***, Biamonti G*. Sam68 regulates EMT through alternative splicing-activated nonsense-mediated mRNA decay of the SF2/ASF proto-oncogene. *J Cell Biol.* 2010; 191: 87-99.

Co-last author and corresponding author

IF= 9.786

15. **Ghigna C***, De Toledo M, Bonomi S, Valacca C, Gallo S, Apicella M, Eperon I, Tazi J, Biamonti G. Pro-metastatic splicing of Ron proto-oncogene mRNA can be reversed: therapeutic potential of bifunctional oligonucleotides and indole derivatives. *RNA Biol.* 2010; 7: 495-503.

***Corresponding author**

IF= 5.377

16. Pistoni M, **Ghigna C**, Gabellini D. Alternative splicing and muscular dystrophy. *RNA Biol.* 2010; 7: 441-52.

IF= 5.377

17. **Ghigna C§**, Valacca C, Biamonti G. Alternative splicing and tumor progression. *Current Genomics* 2008; **9**: 556-70.

§Corresponding author

IF= 2.342

18. Valgardsdottir R, Chiodi I, Giordano M, Rossi A, Bazzini S, **Ghigna C**, Riva S, Biamonti G. Transcription of SatelliteIII non-coding RNAs is a general stress response in human cells. *Nucleic Acids Res.* 2008; **36**: 423-34.

IF= 7.48

19. **Ghigna C**, Giordano S, Shen H, Benvenuto F, Castiglioni F, Comoglio PM, Green MR, Riva S, Biamonti G. Cell motility is controlled by SF2/ASF through alternative splicing of the Ron protooncogene. *Molecular Cell* 2005; **20**: 881-90

IF= 14.6

20. Chiodi I, Corioni M, Giordano M, Valgardsdottir R, Ghigna C, Cobianchi F, Xu RM, Riva S, Biamonti G. RNA recognition motif 2 directs the recruitment of SF2/ASF to nuclear stress bodies. *Nucleic Acids Res.* **32**: 4127-36.

IF= 7.48

21. Shen H, Kan JL, Ghigna C, Biamonti G, Green MR. A single polypyrimidine tract binding protein (PTB) binding site mediates splicing inhibition at mouse IgM exons M1 and M2. *RNA* 2004; **10**: 787-94.

IF= 5.2

22. Ghigna C, Moroni M, Porta C, Riva S, Biamonti G. Altered expression of heterogeneous nuclear ribonucleoproteins and SR factors in human colon adenocarcinomas. *Cancer Res.* 1998; **58**: 5818-24.

IF= 7.54

23. Biamonti G, Ghigna C, Caporali R, Montecucco C. Heterogeneous nuclear ribonucleoproteins (hnRNPs): an emerging family of autoantigens in rheumatic diseases *Clin Exp Rheumatol.* 1998; **16**: 317-26.

IF=2.4

24. Camacho-Vanegas O, Weighardt F, Ghigna C, Amaldi F, Riva S, Biamonti G. Growth-dependent and growth-independent translation of messengers for heterogeneous nuclear ribonucleoproteins. *Nucleic Acids Res.* 1997; **25**: 3950-4.

IF= 7.48

CAPITOLI IN LIBRI

1. Paronetto MP, Gallo S, Di Matteo A, Ghigna C (2014).

Alternative Pre-mRNA Processing in Cancer Progression: Clinical Significance and Therapeutic Implications. *Global Journal of Human Genetics & Gene Therapy.* Volume 2, No. 1, March 2014; Pages 1-16.

1. Ghigna C, Riva S and Biamonti G.

Alternative splicing of tumor suppressors and oncogenes. Capitolo nel libro: RNA and Cancer. Pubblicato da Springer. *In press.*

2. Biamonti G and Ghigna C (2008).

Aberrant alternative splicing: role in tumorigenesis and prospect for therapies. Capitolo nel libro: Multiple pathways towards cancer development. Pubblicato da The Transworld research network, ISBN: 978-81-7895-362-5, pp 87-106.

3. Ghigna C, Valacca C, Giordano M, Cabianca D, Carpanelli E, Valgardsdottir R, Chiodi I, Biamonti G (2006).

Alternative splicing and cancer: a stressing game? Capitolo nel libro: Alternative Splicing in Cancer. Pubblicato da The Transworld research network, ISBN: 81-7895-

235-1, pp 197-208.

4. Valgardsdottir R, Chiodi I, Giordano M, Ghigna C, Biamonti G (2004). Nuclear stress bodies: anatomy and physiology of heterochromatin transcription factories. Recent Research Developments in Cell Science, 73-81 ISBN:81-7895, pp 112-6.

PARTECIPAZIONE A CONGRESSI INTERNAZIONALI

1. Montecucco A, Ghigna C, Leva V, Bonomi S, Soza S, Biamonti G. Splicing factor SF2/ASF at the crossroad between cell proliferation, differentiation and DNA damage response. Interdisciplinary Focus Meeting on “Splicing Regulation: from molecules to organisms”, 20-21 Settembre 2010, Berlino – Germania.

2. Ghigna C, Soza S, Bonomi S, Hollander D, Ben-Dov C, Valcarcel J, Ast G, Biamonti G. The complex connection between alternative splicing and the epithelial to mesenchymal cell transition. EURASNET (European Alternative Splicing Network of Excellence), Annual Reporting Meeting, 1-4 Marzo 2010, Lisbona – Portogallo.

3. Valacca C, Bonomi S, Buratti E, Baralle F, Pedrotti S, Sette C, Ghigna C*, Biamonti G*. Ultraconserved DNA elements, alternative splicing and cell identity. The 11° Congresso FISV (Federazione Italiana Scienze della Vita), 23-25 Settembre 2009, Riva del Garda – Italia.

*** Last authors. Both authors should be considered last author.**

4. Valacca C, Bonomi S, Buratti E, Baralle F, Ghigna C*, Biamonti G*. Sam68 regulates epithelial to mesenchymal transition through alternative splicing-activated NMD of the SF2/ASF proto-oncogene. Cold Spring Harbor meeting: “EUKARYOTIC mRNA PROCESSING”, 18-22 Agosto 2009, Cold Spring Harbor New York – USA.

*** Last authors. Both authors should be considered last author.**

5. Valacca C, Bonomi S, Buratti E, Baralle F, Ghigna C*, Biamonti G.* Sam68 regulates epithelial to mesenchymal transition through alternative splicing-activated NMD of SF2/ASF proto-oncogene. Fourth Annual Eurasnet Meeting, 23-24 April 2009, Assisi – Italia.

*** Last authors. Both authors should be considered last author.**

6. Valacca C, Bonomi S, Buratti E, Baralle F, Ben-Dov C, Valcárcel J, Biamonti G*, Ghigna C*.

Post-transcriptional regulation of EMT: lessons from the *Ron* proto-oncogene. The 10° Congresso FISV (Federazione Italiana Scienze della Vita), 24-27 Settembre 2008, Riva del Garda – Italia.

*** Last authors. Both authors should be considered last author.**

7. Valacca C, Ben-Dov C, Valcarcel J, Ghigna C, Biamonti G.

Post-transcriptional regulation of Epithelial to Mesenchymal Transition (EMT): lessons from the *Ron* oncogene. 13th Annual Meeting of the RNA Society, 28 luglio – 3 Agosto 2008, Berlino – Germania.

8. Valacca C, Bonomi S, Ben-Dov C, Valcárcel J, Ghigna C*, Biamonti G.*

Post-transcriptional regulation of EMT: lessons from the *Ron* proto-oncogene. First International EURASNET Conference on Alternative Splicing, 21-23 Maggio 2008, Cracovia – Polonia.

*** Last authors. Both authors should be considered last author.**

9. Ghigna C, Valacca C, Bonomi S, Buratti E, Tazi J, Baralle F, Riva S., Biamonti G.

Definition of the molecular mechanisms controlling alternative splicing of the *Ron* proto-oncogene. EURASNET Network of Excellence Meeting, 14-18 Aprile 2007, Ile de Bendor - Francia.

10. Ghigna C, Valacca C, Cabianca DS, Riva S, Biamonti G.

Splicing factor SF2/ASF controls cell motility by modulating alternative splicing of the *Ron* proto-oncogene. Symposium on Alternate Transcript Diversity – Biology and Therapeutics EMBL, 21-23 Marzo 2006, Heidelberg – Germania.

11. Ghigna C, Ghilotti M, Giordano S, Comoglio PM, Riva S, Biamonti G.

Cell motility and alternative splicing of the *Ron* oncogene are controlled by SF2/ASF. 8th Annual Meeting of the RNA Society, 1-6 Luglio 2003, Vienna – Austria.

12. Ghigna C, Giordano S, Ghilotti M, Comoglio PM, Riva S, Biamonti G.

Cell motility and alternative splicing of the *Ron* oncogene are controlled by SF2/ASF. V Meeting of Molecular Oncology (gruppo di Oncologia Molecolare SIC), 12-15 Maggio 2003, Positano – Italia.

13. Ghigna C, Riva S, Biamonti G.

Enhancer and silencer elements in two successive exons determine the alternative pattern of the proto-oncogene *Ron*. IV Meeting of Molecular Oncology (gruppo di Oncologia Molecolare SIC), 12-15 Maggio 1999, Positano – Italia.

14. Camacho-Vanegas O, Weighardt F, Ghigna C, Amaldi F, Riva S., Biamonti G.

Growth-dependent and growth-independent translation of the mRNAs for hnRNP proteins. European Reserch Conference: Molecular Biology of RNA: Translation, Stability and localization of mRNA, 13-18 Settembre 1997, Giens - Francia.

PARTECIPAZIONE A CONGRESSI NAZIONALI

1. Ghigna C, Valacca C, Bonomi S, Buratti E, Petrotti S, Baralle F, Sette C, Biamonti G.

Sam68 regulates epithelial to mesenchymal transition through alternative splicing-activated nonsense mediated mRNA decay of the SF2/ASF proto-oncogene. Congresso del Dipartimento di SCIENZE DELLA VITA del Consiglio nazionale delle Ricerche (CNR), 11-12 Ottobre 2010, Roma – Italia.

2. Bonomi S, De Toledo M, Gallo S, Apicella M, Eperon I, Tazi J, Biamonti G and Ghigna C.

Pro-metastatic splicing of the Ron proto-oncogene mRNA can be reversed: Therapeutic potential of bifunctional oligonucleotides and indole derivatives. Congresso del Dipartimento di SCIENZE DELLA VITA del Consiglio nazionale delle Ricerche (CNR), 11-12 Ottobre 2010, Roma – Italia.

3. Ghigna C, Giuseppe Biamonti, Cristina Valacca, Serena Bonomi, Maria Apicella. Regolazione post-trascrizionale della transizione epitelio mesenchimale (EMT). Convegno Congiunto DGM-IGM, 19-20 Febbraio 2009, Pavia – Italia.

4. Valacca C, Ghigna C, Biamonti G.

Post-transcriptional regulation of EMT: lessons from the Ron proto-oncogene. 3° Seminario Nazionale SIBBM, 25-26 Giugno 2007, Torino – Italia.

5. Ghigna C, Giordano S, Cabianca DS, Comoglio PM, Riva S, Biamonti G.

ASF/SF2 regola lo splicing alternativo del proto-oncogene *Ron* e induce mobilità cellulare. Convegno Congiunto DGM-IGM, 24-25 Febbraio 2007, Pavia – Italia.

6. Ghigna C, Gabba S, Giordano S, Comoglio PM, Riva S, Bimonti G

Cell Motility and Alternative Splicing of the *Ron* Proto-Oncogene are Modulated by Splicing Factor ASF/SF2. The RNA world: from basic to applied research, 10-11 Giugno 2004, Roma – Italia.

7. Ghigna C, Giordano S, Ghilotti M, Comoglio PM, Riva S, Biamonti G.

SF2/ASF regola lo splicing alternativo del proto-oncogene *Ron* e induce mobilità cellulare. RNA day: Regolazione dell'espressione genica a livello post-trascrizionale, 28 Gennaio 2003, Università La Sapienza, Roma – Italia.

8. Ghigna C, Riva S, Biamonti G.

Lo splicing alternativo dell'esone 11 del proto-oncogene Ron è controllato da un enhancer e da un silencer posti nell'esone immediatamente a valle. 2° Congresso FISV (Federazione Italiana Scienze della Vita), 30 Settembre – 4 Ottobre 2000, Riva del Garda (Trento) – Italia.

9. Ghigna C, Muscarà G, Collesi C, Riva S, Biamonti G.

Analisi molecolare dello splicing alternativo dell'oncogene *Ron*". Atti del Convegno Congiunto ABCD, AGI, SIBBM e SIMGBM, 1-4 Ottobre 1998, Montesilvano Pescara – Italia.

10. Camacho-Vanegas O, Weighardt F, Ghigna C, Amaldi F, Riva S, Biamonti G.

Studio della regolazione traduzionale della hnRNP A1. Atti del Convegno Congiunto ABCD, SIBBM e SIMGBM, 29 Settembre - 3 Ottobre 1997, Montesilvano (Pescara) – Italia.

11. Biamonti G, Ghigna C, Weighardt F, Moroni M. Porta C.

Alternative splicing of CD44 altered expression of hnRNP and SR proteins in human colon cancer". Atti della XIV Riunione nazionale di oncologia sperimentale e clinica, 13-16 Ottobre 1996, Milano. Tumori volume 83, numero 4.

12. Ghigna C, Moroni M, Porta C, Riva S, Biamonti G.

Analisi molecolare dello splicing alternativo di CD44 nell'adenocarcinoma del colon. Atti del Convegno Congiunto ABCD, AGI, SIBBM e SIMGBM, 2-5 Ottobre 1996, Riccione (Rimini) – Italia.

13. De Stanchina E, Gabellini D, Ghigna C, Norio P, Giacca M, Falaschi A, Riva S, Biamonti G.

Identificazione di proteine che legano un'origine di replicazione del DNA umano. Atti del Convegno Congiunto ABCD, AGI, SIBBM e SIMGBM. 2-5 Ottobre 1996, Riccione (Rimini) – Italia.