

# CURRICULUM VITAE

## Mario Capasso

ORCID ID: [orcid.org/0000-0003-3306-1259](https://orcid.org/0000-0003-3306-1259)

URL for web site: <https://www.docenti.unina.it/mario.capasso>

(redatto ai sensi degli Art. 46 e 47 del D.P.R. 28.12.2000, n. 445)

**Il sottoscritto Mario Capasso, nato a Napoli il 07/04/1977 residente in Napoli Corso Amedeo di Savoia 182, consapevole, ai sensi dell'art. 76 del D.P.R. 445/2000, che dichiarazioni mendaci, formazione o uso di atti falsi sono puniti ai sensi del codice penale e delle leggi speciali in materia,**

**DICHIARA:**

### Qualifications

- 10/26/2001: Degree in Biotechnology, University of Naples Federico II with vote: 110/110.
- 22/01/2007: PhD in Molecular Medicine of adults and children, University of Foggia, with the vote of Ottimo.

### WORK EXPERIENCES

- 2002: Scholarship holder at the research center ConSDABI, Circello (BN).
- 2003: Scholarship at the Department of Biochemistry and Medical Biotechnology (DBBM), University of Naples Federico II.
- 2004-2006: PhD student at the CEINGE Advanced Biotechnology Research Institute, Naples.
- 2007-2008: Post doc at Children's Hospital of Philadelphia, USA.
- 2009-2010: Scholarship at the Research Institute CEINGE Advanced Biotechnologies, Naples
- 2009 to date: Supervisor of the Biostatistic Consulting Center at the CEINGE Advanced Biotechnologies.
- 2011 to date: Fixed-term researcher (Law 04.11.2005 No. 230), University of Naples Federico II, (MED / 03, Medical Genetics), Department of Molecular Medicine and Medical Biotechnology. Research activity carried out at the CEINGE Advanced Biotechnology Research Institute, Naples.
- 2013 to date: Member of the Working Group of the Italian Association of Hematology and Pediatric Oncology (AIEOP) in Lab.
- 2018 to date Associate Professor Department of Molecular Medicine and Medical Biotechnology. Research activity carried out at the CEINGE Advanced Biotechnology Research Institute, Naples.

### SCIENTIFIC ACTIVITY

#### Scientific Output

- 1) 62 scientific publications (2 Nat Genet, 2 Nature, 1 NEJM) in international peer-reviewed journals of which 12 as first author and 9 as last author (Total citations: 1581. H-index: 22)
- 2) 10 invited seminars (in 8 national and 2 international research institutes)
- 3) 13 invitations as congress speaker (7 national and 6 international)

- 4) 4 invitations as a speaker to training courses concerning medical genetics
- 5) 7 projects financed in progress 5 concluded
- 6) 3 Awards received

The indexes concerning the publications were extracted from SCOPUS

Description of the research activity

- Since 2003 Mario Capasso has been interested in studying the genetic basis of multifactorial and monogenic diseases. Thanks to participation in international and national training courses and laboratory experience, he acquired the knowledge for the identification of "disease genes", specializing mainly in analysis of medical and genetic statistics, of genetic association like case-control studies, linkage, meta-analysis, microarray data and deep sequencing. The aim of his research is to broaden the knowledge about the genetic and biological bases of pediatric tumors and complex diseases that can be transferred into clinical practice, through two objectives: a) Identification of genetic factors through large-scale genome analysis (deep sequencing and genome-wide association studies); b) Functional characterization of the role of genetic factors in altering the molecular mechanisms underlying complex diseases including tumors by means of functional genomics, cellular and molecular biology.

Facility manager

- Mario Capasso has been director of the CEINGE Biostatistics Consultancy Center since 2009, providing assistance to research groups for data analysis of research projects in medicine, genomics and population genetics.

SUPERVISION OF LAURENDI, NEO-GRADUATES, POST-DOC

- 2009-2011: Giuseppe Petrosino, Postgraduate fellowship, Next position: PhD student, Anton Dohrn Zoological Station, Naples, Italy
- 2010-2013: Francesca Totaro, PhD student, Next position: Postdoctoral fellowship at the Center for Advanced Biomaterials for Healthcare at CRIB, Naples, Italy
- 2013-2015: Piero Pignataro, Postgraduate fellowship, Next position: Cytogenetics and Cytogenomic Center, University of Naples Federico II, Naples, Italy
- 2015: Andrea Cirino, Postgraduate fellowship, Next position: PhD student at the University of Naples Federico II, Naples, Italy
- 2013-2014: Francesco Maria Calabrese, Postdoctoral fellowship, Next position: Genome Science Department Washington University, Seattle, USA
- 2014-2016: Lucia Pezone, PhD student, CEINGE Advanced Biotechnologies, Naples, Italy
- 2014 - today: Alessandro Lasorsa, Postgraduate fellowship
- 2010 - today: Flora Cimmino, Postdoctoral fellowship
- 2016 - to date: Alessandro Testori, Postdoctoral fellowship
- 2015 - today: Daniela Formicola, Postdoctoral fellowship
- 2015- to date: Antonella Cardinale, Master's Degree in Biotechnology and Postgraduate fellowship
- 2016 - to date: Giusy Vignola, Student Master's Degree in Biotechnology

Reviewer (Scientific works and research projects)

- Scientific journals: GUT, Journal of Human Genetics, PlosOne, Carcinogenesis, BMC Cancer, British Journal Cancer, Journal of the American Society of Nephrology, Cancer Research, Cancer Discovery
- Reviewer activity for the projects of the Austrian Science Fund (WFW).
- 2013 Review panel member, Austrian Science Fund (WFW), Austria
- 2015 panel member review, ERA-NET: TRANSCAN-2, European Community
- 2016 Advisory Board: 8th Annual Next Generation Sequencing Congress & 3rd Annual Single Cell Analysis Congress 2016 by Oxford Global
- 2016 to date Editorial Board Member of the panel: Genetics and Genomics of the scientific journal: "Scientific Reports"
- 2017 Advisory Board: Annual Next Generation Sequencing Congress & Annual Single Cell Analysis Congress 2017 by Oxford Global
- 2017 Review panel member, Competitive Banning Foundation of Sardinia
- 2018 Review panel member, Pediatric Research Project Grant 2018, Irlanda

#### FUNDED PROJECTS CONCLUDED

1. 01/01 / 2011-31 / 12/2013: MIUR - FIRB Future in research, ID: RBFR08DWQ3, Budget: € 238,400, Principal Investigator, "A multiple methodological approach to identify susceptibility genes to neuroblastoma clinically aggressive".
2. 01/01 / 2011-31 / 12/2014: AIRC - Italian Association for Cancer Research, ID: 10537, Budget: € 150,000, Principal Investigator, "High-throughput sequence analysis of the tyrosine kinome in neuroblastoma".
3. 01/01 / 2011-31 / 12/2011: Italian Foundation for the Fight against Neuroblastoma, Budget: € 37,000, Principal Investigator, "Discovering interactions between BARD1 and other candidate genes in sporadic neuroblastoma".
4. 01/01 / 2012-31 / 12/2014: Italian Foundation for the Fight against Neuroblastoma, Budget: 117,000 €, Principal Investigator, "Using genome-wide approaches to improve diagnosis, prognosis and treatment of neuroblastoma".
5. 01/01 / 2014-31 / 12/2016: Italian Foundation for the Fight against Neuroblastoma, Budget: € 405,000, Co-Investigator, "Fast development of a personalized medicine of high-risk neuroblastoma by drug repositioning and genome-based targeting. "
6. 03/11 / 2014-03 / 11/2018: Ministry of Health, ID: GR-2011-02348722, Budget: 336,007.76 €, Principal Investigator, "Genome-wide analyses to improve prognostic and therapeutic strategies in neuroblastoma".
7. 23/01 / 2017-23 / 1/2019: STAR project Linea 1 2016, Budget: € 94,000, Principal Investigator, "Identification and characterization of shared susceptibility loci for neural crest cell-derived tumors".

#### FUNDED PROJECTS IN PROGRESS

1. 01/04 / 2013-01 / 04/2021: NIH, ID: R01 CA124709-06, (USA), Budget: 134.175 \$, Co-Investigator, "The Genetic Basis of Neuroblastoma Tumorigenesis".
2. 01/01 / 2017-31 / 12/2020: AIRC - Italian Association for Cancer Research, ID: 19255, Budget: € 294,000, Principal Investigator, "Understanding the shared genetic and biological basis among neural crest cells-derived tumors" .

3. 01/09 / 2017-01 / 09/2020: OPEN the Association of Pediatric Oncology and Neuroblastoma, Principal Investigator, "Liquid biopsy for the care of children with pediatric solid tumors".
4. 01/01 / 2018-31 / 12/2021: Ministry of Health, GR-2016-02364546, Co-Investigator, "Advanced therapeutic medicinal product based on CD30-specific chimeric antigen receptor (CAR) T cells for treatment of patients with relapsed / refractory CD30 + lymphomas".
5. 01/01 / 2020 - 31/12/2022: Italian Foundation for the Fight against Neuroblastoma, Principal Investigator, "GENEDREN".

#### AWARDS AND AWARDS

1. 02/27/2008: winner of the "Patient-Oriented Research award" at the "Annual Children's Hospital of Philadelphia Poster Day", Philadelphia (USA).
2. 05/03/2010: winner of the "Guido Paolucci International Award" Academy of Sciences of Bologna, Italy, best scientific contribution of pediatric oncology topic published in English in a scientific journal reviewed by the JCR during 2009.
3. 20/05/2011: AIEOP Workshop ... in Lab Award, Best scientific work in oncological pediatrics.

#### ORGANIZATION OF SCIENTIFIC CONGRESSES

2015: IV AIEOP Workshop in Lab. Naples.

#### REPORTER ON THE INVITATION TO INTERNATIONAL CONGRESSES

1. 05/22/2014: 3rd World Genetics & Genomics Online Conference. Title: Genome-wide association to understand the genetics and biology of neuroblastoma.
2. 10/10/2014: 19th World Congress on Advances in Oncology and 17th International Symposium on Molecular Medicine. Athens, Greece. Title: Genome-wide association to understand the genetics and biology of neuroblastoma
3. 20/10/2014: 2nd qPCR & Digital PCR Congress, London, UK. Title: qPCR methods to improve prediction of cancer prognosis.
4. 13/09/2015: 7th Annual Next Generation Sequencing Congress & 3rd Annual Single Cell Analysis Congress. London. Title: Whole Exome and Targeted Sequencing of Clinically Aggressive Neuroblastoma.
5. 25/04/2016: The Game of Epigenomics. Dubrovnik. Title: Whole Exome and Targeted Sequencing of Clinically Aggressive Neuroblastoma.
6. 25/10/2017: SIOPEN Research Symposium. Berlin. Title: Identification of ultra-HR patients using gene expression profiling of Kinome.

#### SPEAKER at NATIONAL CONGRESSE

1. 13/03/2006: Genetics of multifactorial traits. Naples. Title: Genetics of Chronic Hepatitis.
2. 11/18/2006: Pharmacogenetics, Naples. Title: The IFN experience, Pharmacogenetics tools in pediatric research.
3. 06/06/2010: XXXVI National Congress AIEOP. Pisa. Title: New genes in solid tumors.
4. 21/11/2012: XV National Congress SIGU. Sorrento. Title: Implication of mtDNA mutations in neuroblastoma.

5. 10/05/2013: Rehabilitation in Neuro-Oncology. Naples. Title: Genetics of Neuroblastoma
6. 15/09/2015: IV AIEOP Workshop in Lab. Naples. Title: Clinical genomics in pediatric oncology.
7. 12.16.2018. Pediatric Surgical Oncology Today. Bambino Gesù Hospital, Rome. Title: Genetics of Neuroblastoma.

#### REPORT ON CALL FOR TRAINING COURSES IN MEDICAL GENETICS

1. 24/02/2017: Medicina Del Futuro o Futuro della Medicina, Pavia. Titolo: NGS of Neuroblastoma.
2. 04/04/2017: Corso di perfezionamento "Citogenetica e Citogenomica", Napoli. Titolo: Clinical Genomics of Pediatric Cancers.
3. 26/01/2018: V Corso di Formazione in Genetica Medica. Titolo: Neoplasia dell'età pediatrica.
4. 10/04/2018: Corso di perfezionamento Citogenetica e Citogenomica, Napoli. Titolo: Clinical Genomics of Pediatric Cancers.
5. 10/4/2019: WorkShop: Genome editing: a star is born, Firenze. Titolo: Genome editing to study the noncoding variants impact on carcinogenesis
6. 09/9/2019: NGS in Clinical Settings, Napoli. Titolo: NGS: chiamata delle varianti, annotazione e interpretazione
7. 20/9/2019 Corso avanzato di Cito-Genetica costituzionale e acquisita. Grandangolo in Genetica Medica. Roma. Titolo: Genome editing nello studio delle varianti non codificanti: impatto nella carcinogenesi

#### INVITED SEMINARS

1. 12/07/2007: Chalk Talk, Children's Hospital of Philadelphia, Philadelphia, USA. Title: Genome-wide association study of Neuroblastoma.
2. 05/22/2008: Post Doc Seminar Series, Children's Hospital of Philadelphia, Philadelphia, USA. Title: A Genome-wide Association Study Shows That Common Alleles of BRCA1-associated RING Domain Protein (BARD1) Predispose to High-risk Neuroblastoma.
3. 21/06/2011: Interdepartmental Seminars, University of Naples Federico II. Title: Discovering genetic bases of neuroblastoma.
4. 15/03/2013: Job Seminar, University of Trento. Title: Genome-wide approaches to unravel the genetic basis of neuroblastoma and improve the prognosis prediction.
5. 20/05/2013: Interdepartmental Seminars, University of Naples Federico II. Title: Genome-wide approaches to unravel the genetic basis of neuroblastoma and improve the prognosis prediction.
6. 12/10/2016: Bambino Gesù Hospital in Rome. Title: The genomic basis of neuroblastoma.
7. 06/04/2016: University of Padua. Title: The genomic basis of neuroblastoma.
8. 28/04/2017: School of Medical Genetic Specialization. Florence. Title: The genetic basis of neuroblastoma.
9. 24/07/2017: CNR, GENETIC RESEARCH AND BIOMEDICAL INSTITUTE (IRGB). Cagliari. Title: The genetic basis of neuroblastoma.

10. 14/11/2017: IRCCS SDN, Institute of Diagnostic and Nuclear Research. Title: Discovery genomic alterations of neuroblastoma to develop a personalized drug therapy

#### INTERNATIONAL TRAINING COURSES

- From 30/03/2005 to 02/04/2005: "1st Course in Statistical Genetic Analysis of Complex Phenotypes", European School of Genetic Medicine, Bologna University Residential Center (Italy).
- From 03/05/2006 to 05/05/2006: "2nd Course in Statistical Genetic Analysis of Complex Phenotypes" European School of Genetic Medicine, Bologna University Residential Center (Italy).
- From 04/06/2007 to 08/06/2007: "Basic Gene Mapping / Linkage Course", Rockefeller University, New York (USA).
- From 10/12/2007 to 12/14/2007: "Advanced Gene Mapping Course", Rockefeller University, New York (USA).
- From 24/09/2012 to 28/09/2012 "Genomic Analysis of Complex and Monogenic Disorders" Cagliari (Italy).
- From 10/29/2012 to 11/03/2012: EMBO Practical Course: "Analysis of High-Throughput Sequencing Data" Wellcome Trust Genome Campus, Hinxton, UK

#### PUBLICATIONS

1. Del Vecchio A, Laforgia N, **Capasso M**, Iolascon A, Latini G. The role of molecular genetics in the pathogenesis and diagnosis of neonatal sepsis. Clin Perinatol. 2004 Mar;31(1):53-67. Review.
2. Dufour C, **Capasso M**, Svahn J, Marrone A, Haupt R, Bacigalupo A, Giordani L, Longoni D, Pillon M, Pistorio A, Di Michele P, Iori AP, Pongiglione C, Lanciotti M, Iolascon A. Homozygosity for (12) CA repeats in the first intron of the human IFN-gamma gene is significantly associated with the risk of aplastic anaemia in Caucasian population. Br J Haematol. 2004 Sep;126(5):682-5.
3. Svahn J, **Capasso M**, Lanciotti M, Marrone A, Haupt R, Bacigalupo A, Pongiglione C, Boschetto L, Longoni D, Pillon M, Pistorio A, Di Michele P, Iori AP, Calvillo M, Locasciulli A, Menna G, Riccardi R, Ramenghi U, Dufour C, Iolascon A. The polymorphisms -318C>T in the promoter and 49A>G in exon 1 of CTLA4 and the risk of aplastic anemia in a Caucasian population. Bone Marrow Transplant. 2005 Mar;35 Suppl 1:S89-92.
4. Barone M, Spano D, D'Apolito M, Centra M, Lasalandra C, **Capasso M**, Di Leo A, Volinia S, Arcelli D, Rosso N, Francavilla A, Tiribelli C, Iolascon A. Gene expression analysis in HBV transgenic mouse liver: a model to study early

- events related to hepatocarcinogenesis. *Mol Med.* 2006 Apr-Jun;12(4-6):115-23.
5. Persico M, **Capasso M**, Persico E, Masarone M, Renzo Ad, Spano D, Bruno S, Iolascon A. Interleukin-10 - 1082 GG polymorphism influences the occurrence and the clinical characteristics of hepatitis C virus infection. *J Hepatol.* 2006 Dec;45(6):779-85.
  6. **Capasso M**, Avvisati RA, Piscopo C, Laforgia N, Raimondi F, de Angelis F, Iolascon A. Cytokine gene polymorphisms in Italian preterm infants: association between interleukin-10 -1082 G/A polymorphism and respiratory distress syndrome. *Pediatr Res.* 2007 Mar;61(3):313-7.
  7. Cimmino F, Spano D, **Capasso M**, Zambrano N, Russo R, Zollo M, Iolascon A. Comparative proteomic expression profile in all-trans retinoic acid differentiated neuroblastoma cell line. *J Proteome Res.* 2007 Jul;6(7):2550-64.
  8. Persico M, **Capasso M**, Persico E, Svelto M, Russo R, Spano D, Crocè L, La Mura V, Moschella F, Masutti F, Torella R, Tiribelli C, Iolascon A. Suppressor of cytokine signaling 3 (SOCS3) expression and hepatitis C virus-related chronic hepatitis: Insulin resistance and response to antiviral therapy. *Hepatology.* 2007 Oct;46(4):1009-15.
  9. Persico M, **Capasso M**, Russo R, Persico E, Crocè L, Tiribelli C, Iolascon A. Elevated expression and polymorphisms of SOCS3 influence patient response to antiviral therapy in chronic hepatitis C. *Gut.* 2008 Apr;57(4):507-15.
  10. Maris JM, Mosse YP, Bradfield JP, Hou C, Monni S, Scott RH, Asgharzadeh S, Attiyeh EF, Diskin SJ, Laudenslager M, Winter C, Cole KA, Glessner JT, Kim C, Frackelton EC, Casalunovo T, Eckert AW, **Capasso M**, Rappaport EF, McConville C, London WB, Seeger RC, Rahman N, Devoto M, Grant SF, Li H, Hakonarson H. Chromosome 6p22 locus associated with clinically aggressive neuroblastoma. *N Engl J Med.* 2008 Jun 12;358(24):2585-93.
  11. Spano D, Cimmino F, **Capasso M**, D'Angelo F, Zambrano N, Terracciano L, Iolascon A. Changes of the hepatic proteome in hepatitis B-infected mouse model at early stages of fibrosis. *J Proteome Res.* 2008 Jul;7(7):2642-53.

12. **Capasso M**, Russo R, Iolascon A. Farmacogenomica e farmacogenetica: profilo genetico individuale e risposta ai farmaci. *Minerva Pediatr* 2009;61:615-7 (PMID: 19935509).
13. Persico M, Russo R, Persico E, Svelto M, Spano D, Andolfo I, La Mura V, **Capasso M**, Tiribelli C, Torella R, Iolascon A. SOCS3 and IRS-1 gene expression differs between genotype 1 and genotype 2 hepatitis C virus-infected HepG2 cells. *Clin Chem Lab Med*. 2009;47(10):1217-25.
14. Elia J, **Capasso M**, Zaheer Z, Lantieri F, Ambrosini P, Berrettini W, Devoto M, Hakonarson H. Candidate gene analysis in an on-going genome-wide association study of attention-deficit hyperactivity disorder: suggestive association signals in ADRA1A. *Psychiatr Genet*. 2009 Jun;19(3):134-41.
15. **Capasso M**, Devoto M, Hou C, Asgharzadeh S, Glessner JT, Attiyeh EF, Mosse YP, Kim C, Diskin SJ, Cole KA, Bosse K, Diamond M, Laudenslager M, Winter C, Bradfield JP, Scott RH, Jagannathan J, Garriss M, McConville C, London WB, Seeger RC, Grant SF, Li H, Rahman N, Rappaport E, Hakonarson H, Maris JM. Common variations in BARD1 influence susceptibility to high-risk neuroblastoma. *Nat Genet*. 2009 Jun;41(6):718-23.
16. **Capasso M**, Ayala F, Russo R, Avvisati RA, Asci R, Iolascon A. A predicted functional single-nucleotide polymorphism of bone morphogenetic protein-4 gene affects mRNA expression and shows a significant association with cutaneous melanoma in Southern Italian population. *J Cancer Res Clin Oncol*. 2009 Dec;135(12):1799-807.
17. Spano D, Russo R, Di Maso V, Rosso N, Terracciano LM, Roncalli M, Tornillo L, **Capasso M**, Tiribelli C, Iolascon A. Galectin-1 and its involvement in hepatocellular carcinoma aggressiveness. *Mol Med*. 2010 Mar;16(3-4):102-15.
18. **Capasso M**, Ayala F, Avvisati RA, Russo R, Gambale A, Mozzillo N, Ascierto PA, Iolascon A. MDM2 SNP309 and p53 Arg72Pro in cutaneous melanoma: association between SNP309 GG genotype and tumor Breslow thickness. *J Hum Genet*. 2010 Aug;55(8):518-24.
19. **Capasso M**, Diskin SJ. Genetics and genomics of neuroblastoma. *Cancer Treat Res*. 2010;155:65-84.

20. Wang K, Diskin SJ, Zhang H, Attiyeh EF, Winter C, Hou C, Schnepp RW, Diamond M, Bosse K, Mayes PA, Glessner J, Kim C, Frackelton E, Garris M, Wang Q, Glaberson W, Chiavacci R, Nguyen L, Jagannathan J, Saeki N, Sasaki H, Grant SF, Iolascon A, Mosse YP, Cole KA, Li H, Devoto M, McGrady PW, London WB, **Capasso M**, Rahman N, Hakonarson H, Maris JM. Integrative genomics identifies LMO1 as a neuroblastoma oncogene. *Nature*. 2011 Jan 13;469(7329):216-20.
21. Nguyen le B, Diskin SJ, **Capasso M**, Wang K, Diamond MA, Glessner J, Kim C, Attiyeh EF, Mosse YP, Cole K, Iolascon A, Devoto M, Hakonarson H, Li HK, Maris JM. Phenotype restricted genome-wide association study using a gene-centric approach identifies three low-risk neuroblastoma susceptibility Loci. *PLoS Genet*. 2011 Mar;7(3):e1002026.
22. Andolfo I, Petrosino G, Vecchione L, De Antonellis P, **Capasso M**, Montanaro D, Gemei M, Troncone G, Iolascon A, Orditura M, Ciardiello F, De Vita F, Zollo M. Detection of erbB2 copy number variations in plasma of patients with esophageal carcinoma. *BMC Cancer*. 2011 Apr 11;11:126.
23. Russo R, **Capasso M**, Paolucci P, Iolascon A. Pediatric pharmacogenetic and pharmacogenomic studies: the current state and future perspectives. *Eur J Clin Pharmacol*. 2011 May;67 Suppl 1:17-27.
24. Russo R, Gambale A, Esposito MR, Serra ML, Troiano A, De Maggio I, **Capasso M**, Luzzatto L, Delaunay J, Tamary H, Iolascon A. Two founder mutations in the SEC23B gene account for the relatively high frequency of CDA II in the Italian population. *Am J Hematol*. 2011 Sep;86(9):727-32.
25. Spadaro G, D'Orio C, Genovese A, Galeotafiore A, D'Ambrosio C, Di Giovanni S, Vitale M, **Capasso M**, Lamberti V, Scaloni A, Marone G, Zambrano N. Proteomic analysis of sera from common variable immunodeficiency patients undergoing replacement intravenous immunoglobulin therapy. *J Biomed Biotechnol*. 2011;2011:706746.
26. Daniele A, De Rosa A, De Cristofaro M, Monaco ML, Masullo M, Porcile C, **Capasso M**, Tedeschi G, Oriani G, Di Costanzo A. Decreased concentration of adiponectin together with a selective reduction of its high molecular weight oligomers is involved in metabolic complications of myotonic dystrophy type 1. *Eur J Endocrinol*. 2011 Dec;165(6):969-75.

27. Liguori L, Andolfo I, De Antonellis P, Aglio V, Di Dato V, Marino N, Orloff NI, De Martino D, **Capasso M**, Petrosino G, Schramm A, Navas L, Tonini GP, Eggert A, Iolascon A, Zollo M. The metallophosphodiesterase Mpped2 impairs tumorigenesis in neuroblastoma. *Cell Cycle* 2012 Feb; 11:3, 569-581.
28. Daniele A, De Rosa A, Nigro E, Scudiero O, **Capasso M**, Masullo M, de Laurentiis G, Oriani G, Sofia M, Bianco A. Adiponectin oligomerization state and adiponectin receptors airway expression in chronic obstructive pulmonary disease. *Int J Biochem Cell Biol.* 2012 Mar;44(3):563-9.
29. Bosse KR, Diskin SJ, Cole KA, Wood AC, Schnepf RW, Norris G, Nguyen Ie B, Jagannathan J, Laquaglia M, Winter G, Diamond M, Hou C, Attiyeh EF, Mosse YP, Pineros V, Dizin E, Zhang Y, Asgharzadeh S, Seeger RC, **Capasso M**, Pawel BR, Devoto M, Hakonarson H, Rappaport EF, Irminger-Finger I, Maris JM. Common variation at BARD1 results in the expression of the oncogenic isoform that influences neuroblastoma susceptibility and oncogenicity. *Cancer Res.* 2012 Apr;72(8);2068-78.
30. Diskin SJ, **Capasso M**, Schnepf RW, Cole KA, Attiyeh EF, Hou C, Diamond M, Carpenter EL, Winter C, Lee H, Jagannathan J, Latorre V, Iolascon A, Hakonarson H, Devoto M, Maris JM. Common variation at 6q16 within HACE1 and LIN28B influences susceptibility to neuroblastoma. *Nat Genet.* 2012 Oct;44(10):1126-30.
31. **Capasso M**, Diskin S, Totaro F, Longo L, De Mariano M, Russo R, Cimmino F, Hakonarson H, Tonini GP, Devoto M, Maris JM, Iolascon A. Replication of gwas-identified neuroblastoma risk loci strengthens the role of BARD1 and affirms the cumulative effect of genetic variations on disease susceptibility. *Carcinogenesis.* 2013 Jan 12.
32. De Rosa A, Monaco ML, **Capasso M**, Forestieri P, Pilone V, Nardelli C, Buono P, Daniele A. Adiponectin oligomers as potential indicators of adipose tissue improvement in obese subjects. *Eur J Endocrinol.* 2013 Jun 1;169(1):37-43
33. Keller S, Angrisano T, Florio E, Pero R, Decaussin-Petrucci M, Troncone G, **Capasso M**, Lembo F, Fusco A, Chiariotti L. DNA methylation state of the

galectin-3 gene represents a potential new marker of thyroid malignancy. *Oncol Lett.* 2013 Jul;6(1):86-90. Epub 2013 Apr 18.

34. Francesca Totaro, Flora Cimmino, Piero Pignataro, Giovanni Acierno, Marilena De Mariano, Luca Longo, Gian Paolo Tonini, Achille Iolascon, **Mario Capasso**. Impact of Interleukin-6 -174 G/C Gene Promoter Polymorphism on Neuroblastoma. 21 Oct 2013 | PLOS ONE10.1371/journal.pone.0076810.
35. Barbieri E, De Preter K, **Capasso M**, Johansson P, Man TK, Chen Z, Stowers P, Tonini GP, Speleman F, Shohet JM A p53 drug response signature identifies prognostic genes in high-risk neuroblastoma. *PLoS One.* 2013 Nov 19;8(11):e79843.
36. Diskin SJ, **Capasso M**, Diamond M, Oldridge DA, Conkrite K, Bosse KR, Russell MR, Iolascon A, Hakonarson H, Devoto M, Maris JM. Rare Variants in TP53 and Susceptibility to Neuroblastoma. *J Natl Cancer Inst.* 2014 Apr 1;106(4).
37. Barbieri E, De Preter K, **Capasso M**, Chen Z, Hsu DM, Tonini GP, Lefever S, Hicks J, Versteeg R, Pession A, Speleman F, Kim ES, Shohet JM. Histone chaperone CHAF1A inhibits differentiation and promotes aggressive neuroblastoma. *Cancer Res.* 2014 Feb 1;74(3):765-74.
38. **Capasso M**, Calabrese FM, Iolascon A, Mellerup E. Combinations of genetic data in a study of neuroblastoma risk genotypes. *Cancer Genet. Mar;207(3):94-7*
39. Scudiero O, Monaco ML, Nigro E, **Capasso M**, Guida M, Di Spiezio Sardo A, Prezioso D, Daniele A, Castaldo G. Mannose-binding lectin genetic analysis: possible protective role of the HYPA haplotype in the development of recurrent urinary tract infections in men. *International Journal of Infectious Diseases.* 2014 Feb;19:100-2.
40. Urru SA, Tandurella I, **Capasso M**, Usala E, Baronciani D, Giardini C, Visani G, Angelucci E. Reproducibility of liver iron concentration measured on a biopsy sample: A validation study in vivo. *Am J Hematol.* 2015 Feb;90(2):87-90. doi: 10.1002/ajh.23878.
41. **Capasso M**, Diskin SJ, Cimmino F, Acierno G, Totaro F, Petrosino G, Pezone L, Diamond M, McDaniel L, Hakonarson H, Iolascon A, Devoto M, Maris JM.

Common genetic variants in NEFL influence gene expression and neuroblastoma risk. *Cancer Res.* 2014 1;74(23):6913-24. doi: 10.1158/0008-5472

42. Berni Canani R, Paparo L, Nocerino R, Cosenza L, Pezzella V, Di Costanzo M, **Capasso M**, Del Monaco V, D'Argenio V, Greco L, Salvatore F. Differences in DNA methylation profile of Th1 and Th2 cytokine genes are associated with tolerance acquisition in children with IgE-mediated cow's milk allergy. *Clin Epigenetics.* 2015; 7(1):38. doi: 10.1186/s13148-015-0070-8
43. Cimmino F, Pezone L, Avitabile M, Acierno G, Andolfo I, **Capasso M**, Iolascon A. Inhibition of hypoxia inducible factors combined with all-trans retinoic acid treatment enhances glial transdifferentiation of neuroblastoma cells. *Sci Rep.* 2015 5:11158.
44. Oldridge DA, Wood A, Weichert-Leahey N, Crimmins I, Sussman R, Winter C, McDaniel LD, Diamond M, Hart LS, Zhu S, Durbin AD, Abraham BJ, Anders L, Tian L, Zhang S, Wei JS, Khan J, Bramlett K, Rahman N, **Capasso M**, Iolascon A, Gerhard DS, Guidry Auvil JM, Young R, Hakonarson H, Diskin SJ, Thomas Look A, Maris JM. Genetic predisposition to neuroblastoma mediated by a LMO1 super-enhancer polymorphism. *Nature.* 2015. 528(7582):418-21.
45. Lasorsa VA, Formicola D, Pignataro P, Cimmino F, Calabrese FM, Mora J, Esposito MR, Pantile M, Zanon C, De Mariano M, Longo L, Hogarty MD, de Torres C, Tonini GP, Iolascon A, **Capasso M**. Exome and deep sequencing of clinically aggressive neuroblastoma reveal somatic mutations that affect key pathways involved in cancer progression. *Oncotarget.* 2016 Mar 18. doi: 10.18632/oncotarget.8187.
46. Cimmino F, Avitabile M, Pezone L, Scalia G, Montanaro D, Andreozzi M, Terracciano L, Iolascon A, **Capasso M**. CD55 is a HIF-2 $\alpha$  marker with anti-adhesive and pro-invading properties in neuroblastoma. *Oncogenesis.* 2016 Apr 4;5:e212.
47. Targhetta C, Baronciani D, **Capasso M**, Depau C, Tandurella I, Giuseppina Corona M, Angelucci E. Reproducibility of liver iron concentration measured on a biopsy sample: a validation study in vivo. *Am J Hematol.* 2016 Feb;91(2):E7-8

48. Formicola D, Petrosino G, Lasorsa VA, Pignataro P, Cimmino F, Vetrella S, Longo L, Tonini GP, Oberthuer A, Iolascon A, Fischer M, **Capasso M**. An 18 gene expression-based score classifier predicts the clinical outcome in stage 4 neuroblastoma. *J Transl Med*. 2016 May 17;14(1):142.
49. Calabrese FM, Clima R, Pignataro P, Lasorsa VA, Hogarty MD, Castellano A, Conte M, Tonini GP, Iolascon A, Gasparre G, **Capasso M**. A comprehensive characterization of rare mitochondrial DNA variants in neuroblastoma. *Oncotarget*. *Oncotarget*. 2016 Aug 2;7(31):49246-49258.
50. Cimmino F, Pezone L, Avitabile M, Persano L, Vitale M, Sassi M, Bresolin S, Serafin V, Zambrano N, Scaloni A, Basso G, Iolascon A, **Capasso M**. Proteomic alterations in response to Hypoxia Inducible Factor 2 $\alpha$  in normoxic Neuroblastoma cells. *J Proteome Res*. 2016. Oct 7;15(10):3643-3655.
51. Martone D, Giacobbe M, Capobianco A, Imperlini E, Mancini A, **Capasso M**, Buono P, Orrù S. Exercise intensity and technical demands of small-sided soccer games for under-12 and under-14 players: effect of area per player. *J STRENGTH COND RES* 2016 Aug; :
52. Marotta V, Sciammarella C, **Capasso M**, Testori A, Pivonello C, Chiofalo MG, Pivonello R, Pezzullo L, Botti G, Colao A, Faggiano A. Preliminary data of VEGF-A and VEGFR-2 polymorphisms as predictive factors of radiological response and clinical outcome in iodine-refractory differentiated thyroid cancer treated with sorafenib. *Endocrine* doi: 10.1007/s12020-016-1200-6.
53. Ambrosio S, Amente S, Saccà CD, **Capasso M**, Calogero RA, Lania L, Majello B. LSD1 mediates MYCN control of epithelial-mesenchymal transition through silencing of metastatic suppressor NDRG1 gene. *Oncotarget*. 2017 Jan 17;8(3):3854-3869. doi: 10.18632/oncotarget.12924.
54. Marotta V, Sciammarella C, **Capasso M**, Testori A, Pivonello C, Chiofalo MG, Gambardella C, Grasso M, Antonino A, Annunziata A, Macchia PE, Pivonello R, Santini L, Botti G, Losito S, Pezzullo L, Colao A, Faggiano A. Germline polymorphisms of the VEGF-pathway predict recurrence in non-advanced differentiated thyroid cancer. *J Clin Endocrinol Metab*. 2017 Feb 1;102(2):661-671. doi: 10.1210/jc.2016-2555.

55. McDaniel LD, Conkrite KL, Chang X, **Capasso M**, Vaksman Z, Oldridge DA, Zachariou A, Horn M, Diamond M, Hou C, Iolascon A, Hakonarson H, Rahman N, Devoto M, Diskin SJ. PLoS Genet. 2017 May 8;13(5):e1006787. doi: 10.1371/journal.pgen.1006787. eCollection 2017 May.
56. Pignataro P, Pezone L, Di Gioia G, Franco D, Iaccarino G, Iolascon A, Ciccarelli M, **Capasso M**. Association Study Between Coronary Artery Disease and rs1333049 Polymorphism at 9p21.3 Locus in Italian Population. J Cardiovasc Transl Res. 2017 Jun 21.
57. **Capasso M**, McDaniel LD, Cimmino F, Cirino A, Formicola D, Russell MR, Raman P, Cole KA, Diskin SJ. The functional variant rs34330 of CDKN1B is associated with risk of neuroblastoma. J Cell Mol Med. 2017 Dec;21(12):3224-3230.
58. Pecoraro A, Nigro E, Polito R, Monaco ML, Scudiero O, Mormile I, Cesoni Marcelli A, **Capasso M**, Habetswallner F, Genovese A, Daniele A, Spadaro G. Total and High Molecular Weight Adiponectin Expression Is Decreased in Patients with Common Variable Immunodeficiency: Correlation with Ig Replacement Therapy. Front Immunol. 2017 Jul 31;8:895.
59. Russo R, Cimmino F, Pezone L, Manna F, Avitabile M, Langella C, Koster J, Casale F, Raia M, Viola G, Fischer M, Iolascon A, **Capasso M**. Kinome expression profiling of human neuroblastoma tumors identifies potential drug targets for ultra high-risk patients. Carcinogenesis. 2017 Oct 1;38(10):1011-1020.
60. Romano S, Simeone E, D'Angelillo A, D'Arrigo P, Russo M, **Capasso M**, Lasorsa VA, Zambrano N, Ascianto PA, Romano MF. FKBP51s signature in peripheral blood mononuclear cells of melanoma patients as a possible predictive factor for immunotherapy. Cancer Immunol Immunother. 2017 Sep;66(9):1143-1151.
61. De Falco L, Tortora R, Imperatore N, Bruno M, **Capasso M**, Girelli D, Castagna A, Caporaso N, Iolascon A, Rispo A. The role of TMPRSS6 and HFE variants in iron deficiency anemia in celiac disease. Am J Hematol. 2018 Mar;93(3):383-393.
62. Cimmino F, Formicola D, **Capasso M**. Dualistic Role of BARD1 in Cancer. Genes (Basel). 2017 Dec 8;8(12).

63. Sime W, Niu Q, Abassi Y, Masoumi KC, Zarrizi R, K hler JB, Kjellstr m S, Lasorsa VA, **Capasso M**, Fu H, Massoumi R. BAP1 induces cell death via interaction with 14-3-3 in neuroblastoma. *Cell Death Dis.* 2018 Apr 24;9(5):458
64. Sidarovich V, De Mariano M, Aveic S, Pancher M, Adami V, Gatto P, Pizzini S, Pasini L, Croce M, Parodi F, Cimmino F, Avitabile M, Emionite L, Cilli M, Ferrini S, Pagano A, **Capasso M**, Quattrone A, Tonini GP, Longo L. A High-Content Screening of Anticancer Compounds Suggests the Multiple Tyrosine Kinase Inhibitor Ponatinib for Repurposing in Neuroblastoma Therapy. *Mol Cancer Ther.* 2018 Jul;17(7):1405-1415.
65. Cimmino F, Avitabile M, Diskin SJ, Vaksman Z, Pignataro P, Formicola D, Cardinale A, Testori A, Koster J, de Torres C, Devoto M, Maris JM, Iolascon A, **Capasso M**. Fine mapping of 2q35 high-risk neuroblastoma locus reveals independent functional risk variants and suggests full-length BARD1 as tumor-suppressor. *Int J Cancer.* 2018 Dec 1;143(11):2828-2837
66. Esposito MR, Binatti A, Pantile M, Coppe A, Mazzocco K, Longo L, Capasso M, Lasorsa VA, Luksch R, Bortoluzzi S, Tonini GP. Somatic mutations in specific and connected subpathways are associated with short neuroblastoma patients' survival and indicate proteins targetable at onset of disease. *Int J Cancer.* 2018 Nov 15;143(10):2525-2536.
67. Cimmino F, Avitabile M, Lasorsa VA, Montella A, Pezone L, Cantalupo S, Visconte F, Corrias MV, Iolascon A, **Capasso M**. HIF-1 transcription activity: HIF1A driven response in normoxia and in hypoxia. *BMC Med Genet.* 2019 Feb 26;20(1):37.
68. Gambale A, Russo R, Andolfo I, Quaglietta L, De Rosa G, Contestabile V, De Martino L, Genesio R, Pignataro P, Giglio S, **Capasso M**, Parasole R, Pasini B, Iolascon A. Germline mutations and new copy number variants among 40 pediatric cancer patients suspected for genetic predisposition. *Clin Genet.* 2019 Oct;96(4):359-365.
69. Testori A, Lasorsa VA, Cimmino F, Cantalupo S, Cardinale A, Avitabile M, Limongelli G, Russo MG, Diskin S, Maris J, Devoto M, Keavney B, Cordell HJ, Iolascon A, **Capasso M**. Exploring Shared Susceptibility between Two

Neural Crest Cells Originating Conditions: Neuroblastoma and Congenital Heart Disease. *Genes (Basel)*. 2019 Aug 30;10(9).

70. Avitabile M, Succoio M, Testori A, Cardinale A, Vaksman Z, Lasorsa VA, Cantalupo S, Esposito M, Cimmino F, Montella A, Formicola D, Koster J, Andreotti V, Ghiorzo P, Romano MF, Staibano S, Scalvenzi M, Ayala F, Hakonarson H, Corrias MV, Devoto M, Law MH, Iles MM, Brown K, Diskin S, Zambrano N, Iolascon A, **Capasso M**. Neural crest-derived tumor neuroblastoma and melanoma share 1p13.2 as susceptibility locus that shows a long-range interaction with the SLC16A1 gene. *Carcinogenesis*. 2019 Sep 7. pii: bgz153. doi: 10.1093/carcin/bgz153.

71. Testori A, Lasorsa VA, Cimmino F, Cantalupo S, Cardinale A, Avitabile M, Limongelli G, Russo MG, Diskin S, Maris J, Devoto M, Keavney B, Cordell HJ, Iolascon A, **Capasso M**. Exploring Shared Susceptibility between Two Neural Crest Cells Originating Conditions: Neuroblastoma and Congenital Heart Disease. *Genes (Basel)*. 2019 Aug 30;10(9). pii: E663.

72. Passariello A, Errico ME, Donofrio V, Maestrini M, Zerbato A, Cerchia L, Capasso M, **Capasso M**, Fedele M. PATZ1 Is Overexpressed in Pediatric Glial Tumors and Correlates with Worse Event-Free Survival in High-grade Gliomas. *Cancers (Basel)*. 2019 Oct 11;11(10).

73. Amoroso L, Ognibene M, Morini M, Conte M, Di Cataldo A, Tondo A, D'Angelo P, Castellano A, Garaventa A, Lasorsa VA, Podestà M, **Capasso M**, Pezzolo A. Genomic coamplification of CDK4/MDM2/FRS2 is associated with very poor prognosis and atypical clinical features in neuroblastoma patients. *Genes Chromosomes Cancer*. 2019 Nov 22.

74. **Capasso M**, Lasorsa VA, Cimmino F, Avitabile M, Cantalupo S, Montella A, De Angelis B, Morini M, de Torres C, Castellano A, Locatelli F, Iolascon A. Transcription factors involved in tumorigenesis are over-represented in mutated active DNA binding sites in neuroblastoma. *Cancer Res*. 2019 Nov 29. pii: canres.2883.2019.